

A FRAMEWORK FOR GROUP LEADERSHIP IN THE CONSTRUCTION INDUSTRY IN ABU DHABI

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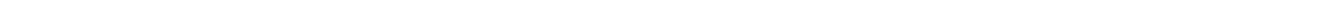
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DEDICATION

This thesis is dedicated to my mother, father, wife, daughters and son.



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ABSTRACT

The aim of the research was to evaluate the operational effectiveness and impact of joint leadership in construction projects in Abu Dhabi (AD). The research started with a thorough and critical review of literature on leadership and culture. The research took a quantitative approach and used a questionnaire to collect data. 145 questionnaires were sent to project managers in Abu Dhabi in the United Arab Emirates (UAE), and 90 responses (62%) were obtained. The data was analysed by descriptive and inferential statistics and used Statistical Package for the Social Sciences (SPSS) software. The results of the research indicated that the majority of participants were leaders, and had different styles. Irrespective of leadership style, most expressed satisfaction with joint leadership of projects and stated that it does improve project success. The study also showed that culture has a significant impact on the types of leaders in UAE construction as well as the operations, durations, costs, and quality of construction projects. Moreover, participants stated that culture has an influence on the design of construction buildings and other facilities. It was however opined that the use of joint leadership in construction projects requires clear clauses in project contracts in respect of roles and responsibilities, as well as providing training for cultural awareness which can improve project efficiency. Most participants agreed that project success in UAE construction is a direct function of the leadership style used. The outcome of the research was used to improve the construction project process framework of Abu Dhabi Police taking into the consideration the findings from the questionnaire. The next step was to test the framework through a focus group. 12 professionals were involved from the original questionnaire survey. The focus group discussion generated additional qualitative descriptions concerning the reasons behind the study participants' perceptions on (a) the likelihood of joint leadership of projects in UAE, (b) the impact of the concept of the project managers in UAE construction, and (c) the influences of UAE culture on construction projects. The improved framework developed was validated by a survey which had 12 questions. This was distributed to 10 project managers and leaders. The results showed that the improved framework will: reduce communication time; improve the choice of joint leaders (two project managers) for the same project; help UAE culture to be communicated better in project designs; help project managers with no engineering background through training; increase internal stakeholders' understanding of joint leadership in AD police projects; increase the understanding of the International Federation of Consulting Engineers (FIDIC) contract in AD police projects; assist AD police project managers' training to address effective and efficient leadership.

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CHAPTER ONE

Introduction

1.1 Introduction to chapter 1

Leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2007). Leaders achieve this by applying their leadership knowledge and skills. Leadership is a practice and usually it is linked with control and power intended at either maintaining the interpersonal relationships in the group, or steering the group to achieve its task. There are a number of different theories related to leadership in literature; e.g., according to Bass's (1989; 1990) theory of leadership, there are three basic ways to explain how people become leaders. One theory states that you can learn leadership, where people choose to learn certain knowledge and skills known as Transformational Leadership Theory. Another theory states that leadership can be situational; an important situation or event may cause an ordinary person to reveal extraordinary leadership qualities to rise to the occasion, known as the Great Events Theory. The third theory states that people are born with certain skills and attributes that can influence their actions, such as beliefs, values, ethics, and character, known as Trait Leadership Theory. Leadership is an important aspect therefore the chapter discusses the need for leadership in project management and the role of culture within this context through the background statement. This is followed by the research aim and objectives, research questions, brief methodology, scope, beneficiaries of the study and structure of the thesis.

1.2 Background statement

The passionate ideas that motivated this research are: a devotion to the project management field as a practised profession in the construction industry, and a personal interest in leadership behaviours and Arab culture.

Bass (1985) studied the different types of organizational change; identifying different sets of behaviour and characteristics that were essential for organizational transformation and stability. The leadership styles identified were significant, transactional and transformational. Bass and Avolio (1995) developed a questionnaire to evaluate leadership competencies called the multifactor leadership questionnaire (MLQ). Results from a series

of studies revealed that transformational leadership has a more major impact on the organization than transactional leadership. On the other hand, Hogan (2000) directed his research towards personal characteristics of leaders; he strongly believed that the skills built were on personality characteristics and he noticed that the personality of leaders decisively affects effectiveness. Personality and competency together produce different leaders suited to different circumstances: transactional leaders for times of low complexity and transformational leaders in times of increased complexity. This agrees with Bass's (1990) assertion that certain leaders are more suited to stable environments and others more suited to a rapidly changing environment. A number of studies have highlighted some important skills relevant to project managers. Rees, Turner and Tampoe (1996) have recognized the six traits of effective project managers and have acknowledged that effective managers are usually of above-average intelligence and have good problem-solving skills. Other traits identified by Rees et al. are behavioural or motivational, such as energy, and skills-based traits, for example, communication. Nonetheless, they do not provide evidence that these traits contribute directly to increased project success. Moreover, Andersen, Grude and Haug (1987) identified the importance of the project manager's personal characteristics, such as initiative, when selecting a project manager. This is similar to Hogan's (2002) statement earlier; personality of a leader is a determinant of effectiveness. However, they did not directly show the significant contribution of personality characteristics to project success (Geoghegan, Linda & Dulewicz, 2008).

Although the importance of effective project management leadership for construction project success is stated and some important leadership competencies are identified, the issues involved in becoming an effective and efficient leader are very much complex and interlinked. Each scenario or location thus provides a unique basis to develop its own leadership. It is thus possible for one organization to have different leadership set-ups for their different projects or regions where they operate. In this regard, this research study will further examine the relationship between a project manager's leadership competencies in Abu Dhabi and the success of the project. This will further enable the identification of cultural aspects that influence change-creating variations resulting in increased project costs and time. This is important to be able to determine appropriate measures for future development of projects.

1.3 Research Aim and Objectives

The aim of this research is to evaluate the operational effectiveness and associated impact on/of project management leadership in the construction industry in Abu Dhabi, with a particular emphasis on the Joint leadership model.

The objectives of this research are:

1. To carry out a literature review on group leadership theories and to analyse the advantages and disadvantages of different leadership types and styles with their situations that are most useful in construction, as well as their varying effectiveness towards project success.
2. To review and evaluate literature on different cultures and their impact on leadership styles portrayed in contemporary organizations with a view to evaluating leadership types and styles that are most suitable for UAE cultures and construction.
3. To collect data through fieldwork on the cultural traits shedding light on leadership styles in UAE construction as well as the challenges faced.
4. To analyse data collected in No.3 to identify features of culture, leadership and project success that are predominant in contemporary UAE.
5. To collect data through questionnaires on impact of dual leadership on the project success.
6. To analyse data collected in No.5 by means of a mixed-method approach, but principally quantitative and deductive, in order to provide an insight into the effectiveness of project manager leadership from theories and practices, and draw conclusions.
7. To develop and validate the framework for Joint leadership in order to evaluate operational effectiveness and its impact on project management leadership.

1.4 Research questions

The research questions are:

- 1- What are the types of leadership styles preferred by the employees in the construction industry of Abu Dhabi?
- 2- How applicable is the Joint leadership model in the construction industry of Abu Dhabi?

-
- 3- What is the impact of Joint leadership on construction projects outcomes in Abu Dhabi?
 - 4- How acceptable is Joint leadership in construction in Abu Dhabi?
 - 5- What factors would enhance the implementation of joint leadership in Abu Dhabi construction?

1.5 Brief methodology

This research discusses literature review about leadership types and styles, joint leadership model and culture aspects. This research adapted quantitative approach where questionnaire were used to collect data on the leadership orientation of project manager in Abu Dhabi. The survey instrument also sought the views of these projects managers on the use, effectiveness and impact of joint leadership in construction especially in the UAE. Data was analysed by descriptive and inferential statistic using SPSS. The result establish where tested using focus group forum. The result where also used to improve the construction project procurement process of ADP. The improve framework was then validated by means of questionnaire survey with ten top management personnel of ADP.

1.6 Scope and limitations of the study

The scope of this research concern the use of joint leadership in construction projects but was limited to its application in Abu Dhabi in the UAE. The scope also concern the styles of leadership and the impact of the culture on how projects managers lead.

The limitations of this study included project managers, project engineer, design manager, cost control managers, Health and Safety (HSE) managers and quality managers who had experience of joint leadership in Abu Dhabi. Another limitation noted is the timing of the distribution of this questionnaire some potential respondents where on holiday and could not fill the questionnaire. Another limitation is the lack of any published research on the joint leadership in UAE.

1.7 Beneficiaries of the study

The research findings will constitutes a step forward towards understanding effective Joint leadership in construction industry in Abu Dhabi. It will help how to select project

managers in a project. Furthermore, research findings will help Abu Dhabi project managers to perceive comprehensively the impact that their behaviour exerted on organisational effectiveness. It will also assist project managers to be more aware of the influence of situational variables on the leadership-effectiveness relationship.

The findings of this research will help project manager to reduce the chain of the communication and make project managers aware of the leadership skill, management and UAE culture. Also, it will be useful for comparative studies on leadership in different cultures and will be a contribution towards understanding leadership in contemporary organizations.

1.8 Structure of the thesis

This thesis is structured in 8 chapters as described below:

Chapter 1 discusses the background statement and research aim, objectives and research questions. Also discusses the brief of methodology, scope and limitation of the study followed by the beneficiaries of the study.

Chapter 2 discusses and covers several aspects of leadership. It first tries to explain the meaning and definitions of leadership and provides an introduction into the literature review of key leadership theories, practices, models, and their influences in the Arab world. It then takes a closer look at the benefits and disadvantages of some of the different leadership styles and their effectiveness in the construction field. As organisations become more global and less hierarchical, there is a need for leadership to provide direction and cohesion and take companies through the organisational changes necessary for survival. The chapter also places emphasis on identifying the factors that can influence the choice of leadership styles or behaviours in workplace situations. It further explains why these leadership styles or behaviours are likely to have a positive effect on individual and group behaviour, and assess leadership behaviours that have potential in the context of a particular leadership model in a construction-based organisation's working practices and culture. Moreover, the chapter looks at different aspects of group leadership: its benefits, disadvantages and the impact of group leadership and decision-making. A discussion on the influence of Arab culture on leadership in construction projects was examined; its impact and the role of project and construction managers.

Chapter 3 covers the overview of construction projects, and briefly discusses types of construction projects. The chapter explains what Building Information Modelling (BIM) is, and discusses the importance of it in construction management by emphasising its benefits. In this chapter, culture is introduced and its impact and effect on construction projects is explained. Furthermore, a look at how BIM affects the design culture in construction projects is further explained. An introduction to Arab culture is reviewed, covering the influence of Arab culture on construction projects and the outstanding problems faced by this issue in the UAE construction industry. Also being discussed is Abu Dhabi issues and a general overview of the UAE, which includes a brief outline about the future of Abu Dhabi city and a presentation of its 2030 construction plan. In this chapter it shows the link between UAE culture and leadership aspect for Abu Dhabi.

Chapter 4 discusses construction projects. It reviews the research methodology. The research epistemology, axiology and ontology are examined in detail. An overview of the population sample is explained and the ethical approvals of the research are covered in this chapter. The data collection method chosen for the research is quantitative, with a questionnaire administered and the response rate evaluated. This is followed by focus group forum and then a questionnaire to validate the findings. A description of how the data is analysed is described followed by the validity and reliability of the data collection and analysis.

Chapter 5 aims to analyse the influence of leadership styles of construction practitioners in UAE. The chapter contains discussion of the results of the data collected based on the survey, and the discussions held during the field study. It also highlights the research findings, grouped into two categories: leadership style and leadership attributes. The study looks at the relationship between leadership styles and demographic information, as well as the impact of culture on construction project success. Lastly, the chapter discussed about the open-ended questions analysis and results on major cultural challenges in construction projects in the UAE and its benefits to UAE culture on construction project delivery.

Chapter 6 discusses focus group data collection and analysis. It also highlights the survey results. The chapter validates these results to make recommendations for the best method and practices of implementing effective project management leadership in construction projects in Abu Dhabi.

Chapter 7 discusses the improved framework for joint project leadership in UAE construction. A distinct framework was developed and tested; both converge and improve upon the existing frameworks of two project leaderships to improve and eliminate the differences between the existing frameworks. The improved framework developed, was validated by a survey which was created with 12 questions and distributed to 10 project managers and leaders. The chapter covers an analysis of the existing framework, the improved framework.

Chapter 8 presents a conclusion of the research study on operational effectiveness and associated impact on project management leadership in the construction industry in Abu Dhabi. The chapter will first record the various achievements of the research aim and objectives. Secondly, it provides recommendations resulting from the research study and provides suggestions for future research.

CHAPTER TWO

A Critical Review of Literature on Leadership

2.1 Introduction to Chapter 2

Discussed in this chapter are several aspects of leadership. The meaning and definitions of leadership are explained, then an introduction to the literature review of major leadership theories, practices and models and their influences in the Arab world will be presented. A closer look at the benefits and disadvantages of the different styles of leadership and their effectiveness in the construction field is considered.

As organizations become more global and less hierarchical, there is a need for leadership to provide direction and cohesion and take companies through the organizational changes necessary for survival. The chapter emphasizes identifying the factors that will influence the choice of leadership styles or behaviours in workplace situations. An explanation of why these leadership styles are likely to have a positive effect on individual and group behaviour is given. An assessment of leadership behaviours and their potential in the context of a particular leadership model in construction-based organizations' working practices and culture is stated. There will be a look at some exemplary leaders in the construction field who knew that if they want to gain commitment and achieve the highest standards, they must be models of the behaviour they expect of others. It all begins with leaders who effectively model the way. Leaders set the example through their daily actions that demonstrate that they are committed to their beliefs. Exemplary leaders clarify values and set the example by aligning their actions with shared values.

2.2 Definitions of Leadership

There are numerous definitions and theories of leadership; however, there are enough similarities in the definitions to conclude that leadership is an effort of influence and the power to induce compliance (Wren, 1995). Many studies have been done on work, work environment, the motivation to work, leaders, leadership, leadership style, and myriad other work-related variables for almost two centuries. It is noted that explaining and understanding the nature of good leadership is probably easier than practising it. Good leadership requires deep human qualities, beyond conventional notions of authority.

Leadership, and the study of it, has roots in the beginning of civilization. Egyptian rulers, Greek heroes, and religious patriarchs all have one thing in common – leadership (Stone & Patterson, 2004).

Other definitions imply that leadership is a process whereby one individual influences other group members toward the attainment of defined group or organizational goals (Yukl, 1998). According to Gardner (1987), leadership is all about 1) envisioning goals, 2) affirming values, 3) motivating, 4) managing, 5) achieving a workable level of unity, 6) explaining, 7) serving as a symbol, 8) representing the group externally, 9) renewing .

On the other hand, Northouse (2007) defined leadership as a process that: (a) involves influencing others, (b) occurs within a group context, and (c) involves goal attainment. Hence, from these sets of definitions it is clear that leadership is the impact on the behaviour of others to achieve common goals and desires. Consequently, how do leaders influence followers to perform specific targets? According to Shamir (1995), leadership is the ability to increase followers' sense of self-efficacy by increasing self-worth and communicating confidence, high expectations and then linking followers' goals to mission, which serves as a basis for identification; generating faith by connecting behaviours and goals to a dream of a better future. All researchers and scholars, no matter which discipline they come from, have, to some degree, agreed on some common grounds, as follows:

1. Every leader has a power to *influence* the people following him.
2. The aim of leadership is to *affect* the followers to reach a specific goal set for the group.

Leadership is not simply about getting people to do things, but to inspire and get people to want to do things (Conger, 1991). Leadership, then, is about shaping beliefs, desires, and priorities. It is about achieving influence, not securing compliance. Leadership therefore needs to be distinguished from such things as management, decision-making, and authority (Haslam, Reicher & Platow, 2011).

Leadership is easy to identify in a situation; however, it is difficult to define precisely. Given the complex nature of leadership, a specific and widely-accepted definition of leadership does not exist, and might never be easy to find.

Leaders of the future will need to be adept conceptual and strategic thinkers, have deep integrity and intellectual openness, find new ways to create loyalty, lead increasingly diverse and independent teams over which they may not always have direct authority, and relinquish their own power in favour of collaborative approaches inside and outside the organization (Hay Group, 2011).

A further distinction, though, firmly embedded in the field is the issue of good leadership in terms of ethics. Whilst many definitions of leadership restrict it to purely non-coercive influence towards shared (and socially acceptable) objectives (e.g. Burns, 1978; Ciulla, 2004) others are somewhat less prescriptive in their attributions, arguing that all leaders may be perceived more or less beneficially by virtue of the group to which they belong. Kellerman (2004a), for example, argues that *“leaders are like the rest of us: trustworthy and deceitful, cowardly and brave, greedy and generous”* and Peter Drucker (quoted in Huey, 1994) states that *“Leadership is all hype. We’ve had three great leaders in this century - Hitler, Stalin and Mao - and you see the devastation they left behind.”*

Indeed, whilst on one side attention is increasing on the moral and ethical dimensions of leadership (e.g. Ciulla, 2004; Maak & Pless, 2006) so too is attention focused on the ‘shadow side’ of leadership. Thus studies of ‘toxic’, ‘narcissistic’ and ‘bad’ leadership are becoming increasingly prominent (Lipman-Blumen, 2005; Maccoby, 2000; Kellerman, 2004b) as are those on executive derailment (McCall, 1998; Dotlich & Cairo, 2003). The psychodynamic approach in particular explores the sub-conscious facets of leadership to reveal the underlying psychological factors that encourage people to act as followers and, at its most extreme point, argues that leadership is “an alienating social myth” that disempowers followers and builds dependency (Gemmell & Oakley, 1992).

2.3 Historical Overview of leadership

According to Van Seters and Field (1990), different eras of leadership have been mapped. The first era in the history of leadership was that of personality. In this era, scholars believed that to become a leader one should imitate great men who displayed leadership qualities. However, it was discovered in the history of leadership that great leaders across all countries and ages had different personalities.

The second era in the history of leadership was that of influence. In this era, the belief is that leadership resulted from the power of influence of a leader over other people. This type of power-based relationship created authoritarian and dictatorial styles of leadership.

The third era of leadership in history revolved around the behavioural aspects of a leader. Scholars placed leadership in the gamut of human behaviour. Leadership is a behavioural pattern that one could copy. The leader could influence and get the results he wants by changing his behaviour according to the requirements of the people.

In the next era of leadership, theorists believe that it is a function of the situation; a person becomes a leader by being in the right place at the right time. The individual did not hold any importance because, given the situation, someone else could have become the leader.

Leadership is a complex and profound subject with hundreds of research and literature reviews endlessly trying to define the specific meaning of the word leadership. Some define it as a process, some as an ability, and others as a relationship. Most scholars believe that leadership is the accomplishment of a goal through the direction of human assistants, and that a successful leader is one who can understand people's motivations and enlist employee participation in a way that marries individual needs and interests to the group's purpose (Prentice, 1961).

There has been extensive literature on leadership from the early 19th century. Leadership traits have been around from the beginning of the existence of man, where one was a leader and obliged to lead the rest of the people. In 1900, the 'great man' theory was the main talk as an innate ability to lead; who was born to lead? In the 1930s, group leadership came into existence; how leadership emerges and develops into small teams. In 1940 to 1950, the trait theory developed, which followed common traits in leaders, and by 1950 to 1960, behaviour patterns. The 1960s to 1970s saw a need for structural and contingency/situational types of leadership that existed in specific situations. The 1980s was all about excellence and an organizational perspective of how to excel and lead in excellence.

In history, leadership has been studied under various fields – politics, military, business, sports, religion, science, arts, literature and many more. From the Prophet Mohammed, who guided people towards the path of wisdom, love and compassion in the world, to the great leaders who have led countries, like George Washington and Abraham Lincoln

setting up the foundations of the democratic form of government, the traits of leadership existed. The organizational focus of the leader has evolved over this same period. Early organizations with authoritarian leaders who believed employees were intrinsically lazy transitioned to make work environments more conducive to increased productivity rates. Today, organizations are transforming into places where people are empowered, encouraged, and supported in their personal and professional growth throughout their careers. As the focus of leaders has changed over time, it has influenced and shaped the development and progression of leadership theory (Stone et al., 2005) see Figure 2.1 and 2.2.

Personality Era

Great Man Period

Great Man Theory (Bowden, 1927; Carlyle, 1841; Galton, 1869)

Trait Period

Trait Theory (Bingham, 1927)

Influence Era

Power Relations Period

Five Bases of Power Approach (French, 1956; French & Reven, 1959)

Persuasion Period

Leader Dominance Approach (Schenk, 1928)

Behaviour Era

Early Behaviour Period

Reinforced Change Theory (Bass, 1960)

Ohio State Studies (Fleishman, Harris & Burt, 1955)

Michigan State Studies (Likert, 1961)

Late Behaviour Period

Managerial Grid Model (Blake & Mouton, 1964)

Four Factor Theory (Bower Seashore, 1966)

Action Theory of Leadership (Argyris, 1976)

Theory X and Y (McGregor, 1960; McGregor, 1966)

Operant Period (Sims, 1977; Ashour & Johns, 1983)

Situation Era

Environment Period

Environment Approach (Hook, 1943)

Open –System Model (Kats & Khan, 1978)

Social Status Period

Role Attainment Theory (Stogdill, 1959)

Leader Role Theory (Homans, 1959)

Socio-technical Period

Socio-technical systems (Trist & Bamforth, 1951)

Contingency Era

Contingency Theory (Evans, 1970; House, 1971)

Path-Goal Theory (Evans, 1970; House, 1971)

Situational Theory (Hersey & Blanchard, 1969; 1977)

Multiple Linkage Model (Yuk, 1971; 1989)

Normative Theory (Vroom & Yetton, 1973; Vroom & Jago, 1988)

Transactional Era

Exchange Period

Vertical Dyad Linkage

Leader Member Exchange Theory (Dansereau, Graen & Haga, 1975)

Reciprocal Influence Approach (Greene, 1975)

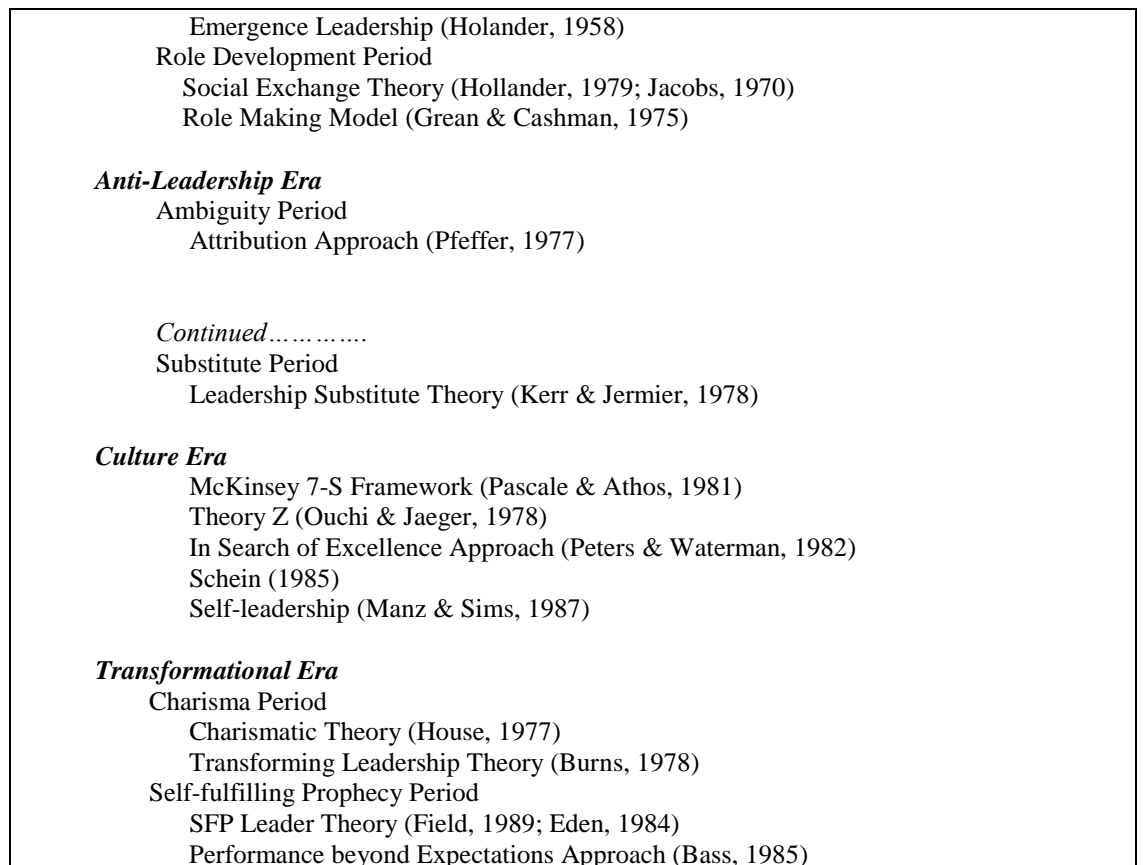


Figure 2.1: The Evolutionary Stages of Leadership Theory

Source: Van Seters and Field (1990)

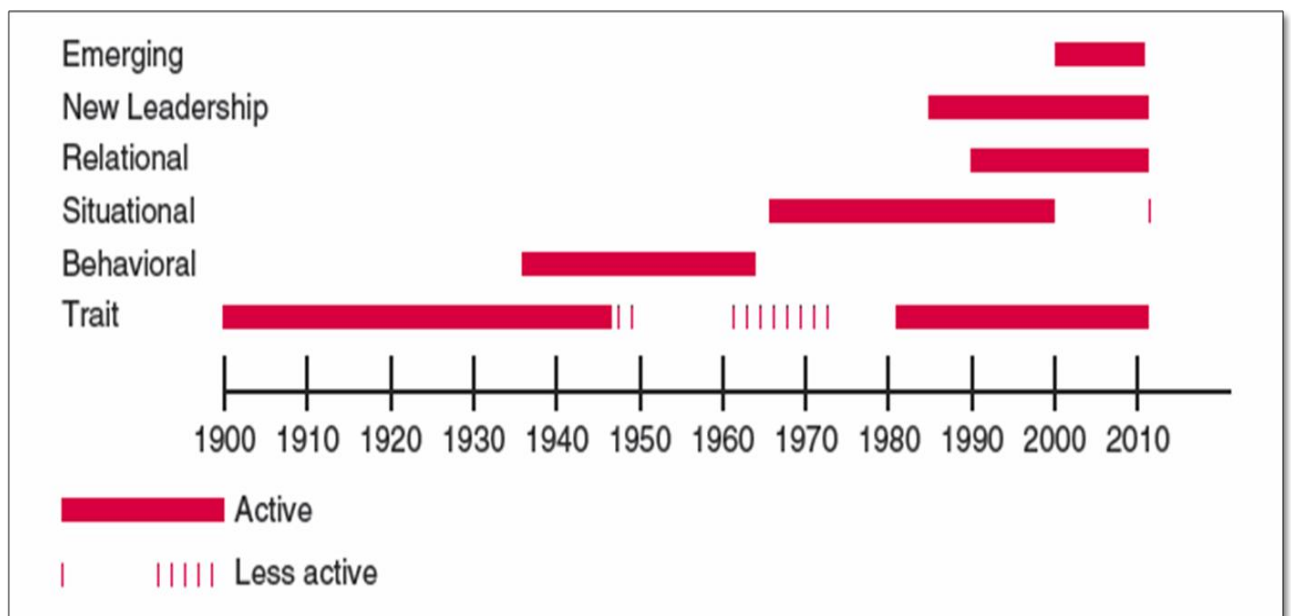


Figure 2.2 - Development of Leadership Theories

Source McKinsey & Company, 2003

2.3.1 Development of Leadership Theories

Over the past 50 years, there have been a number of different theories and opinions conducted on leadership prospects. One theory states that leadership is learned, where people choose to learn certain knowledge and skills; this is known as the Transformational Leadership Theory. Another theory states that leadership can be situational; an important situation or event may cause an ordinary person to reveal extraordinary leadership qualities and to rise to the occasion; this is called the Great Events Theory. Some researchers believe that good leaders are made, not born. One of the best models which address communicative behaviours of leaders as they exercise interpersonal influence to accomplish group goals, is Kevin Barge and Randy Hirokawa's theory of Communication Competency Model of Group Leadership. This model believes that leaders can assist groups to achieve their goals through the process of communication, and that by means of certain competencies such as tasks and interpersonal differences, leaders can exert influence and lead small groups. According to Jago (1982), good leaders develop through a never-ending process of self-study, education, training, and experience.

2.4 General Benefits of Leadership

Leadership, as discussed, is a complex trait that adds value to the organization and if not mastered rightly can lead to the downfall of the organization. Leadership is a vision and the desire to direct. Some of the advantages of leadership are: clarity, belief, imagination, self-development, supportiveness, productivity and strong decision-making. It is beneficial to have the right leadership in place since this will help increase employee morale, which in turn will increase employee productivity. It would also be easier for people to relate to a common vision. Good leadership brings in clarity and belief. Good leaders stretch thinking and help people improve their skills. They are the strongest decision-makers. They pay the price so that people do not have to. Leadership helps expand the worldview so that experiences created can help us see things in a new and different light (Kotter, 2011).

2.5 General Challenges of Leadership

Showing weak leadership will result in chaos, because people will not have a role model to look up to, or a strong supporter. Everyone will have a different perspective of the vision. Businesses with weak leadership may experience high turnover in employment, provide

little or no appropriate training and, in extreme cases, will experience loss of business. Weak leadership can ruin business plans and cost a business significant loss of revenue. Weak leadership breeds inefficiency on all levels of the business, and provides a poor example of work ethic for employees. It does not promote team-building, and in general produces negativity in the workplace.

Some other possible disadvantages are:

- Outsized ambition puts the leader's quest for glory above the wellbeing of others; egotism and arrogance can foster incompetence and corruption (Lipman-Blumen, 2004).
- Leaders can impose their desires and will upon their followers.

2.6 Leadership Styles and Types

Leadership style is the manner and approach of providing direction, implementing plans, and motivating people. Lewin, Lippitt and White (1939) led a group of researchers to identify different styles of leadership. This early study has been very influential and established some major leadership styles. According to the US Army Handbook (1973), the major styles of leadership are:

- 1) Authoritarian or Autocratic
- 2) Participative or Democratic
- 3) Delegative or Free Reign
- 4) The Laissez-faire leadership style
- 5) The Paternalistic leadership style

An efficient leader must have clear goals and objectives, readily mapped, and knows exactly how to guide his people to reach those goals. From a theoretical point of view, the best leadership style is that which involves participation, or a democratic technique where both leaders and followers play a fundamental role in the decision-making. Leadership style is focused on what leaders actually do when dealing with their team, and the best management style, which develops a clear understanding between what leaders do and how the team reacts. The common context of all the models and styles comes down to three traits of a successful leader:

- 1) The desire to lead
- 2) Commitment to the mission and vision of the organization, and
- 3) Integrity.

In the figure2.3, the main leadership styles and types are discussed:

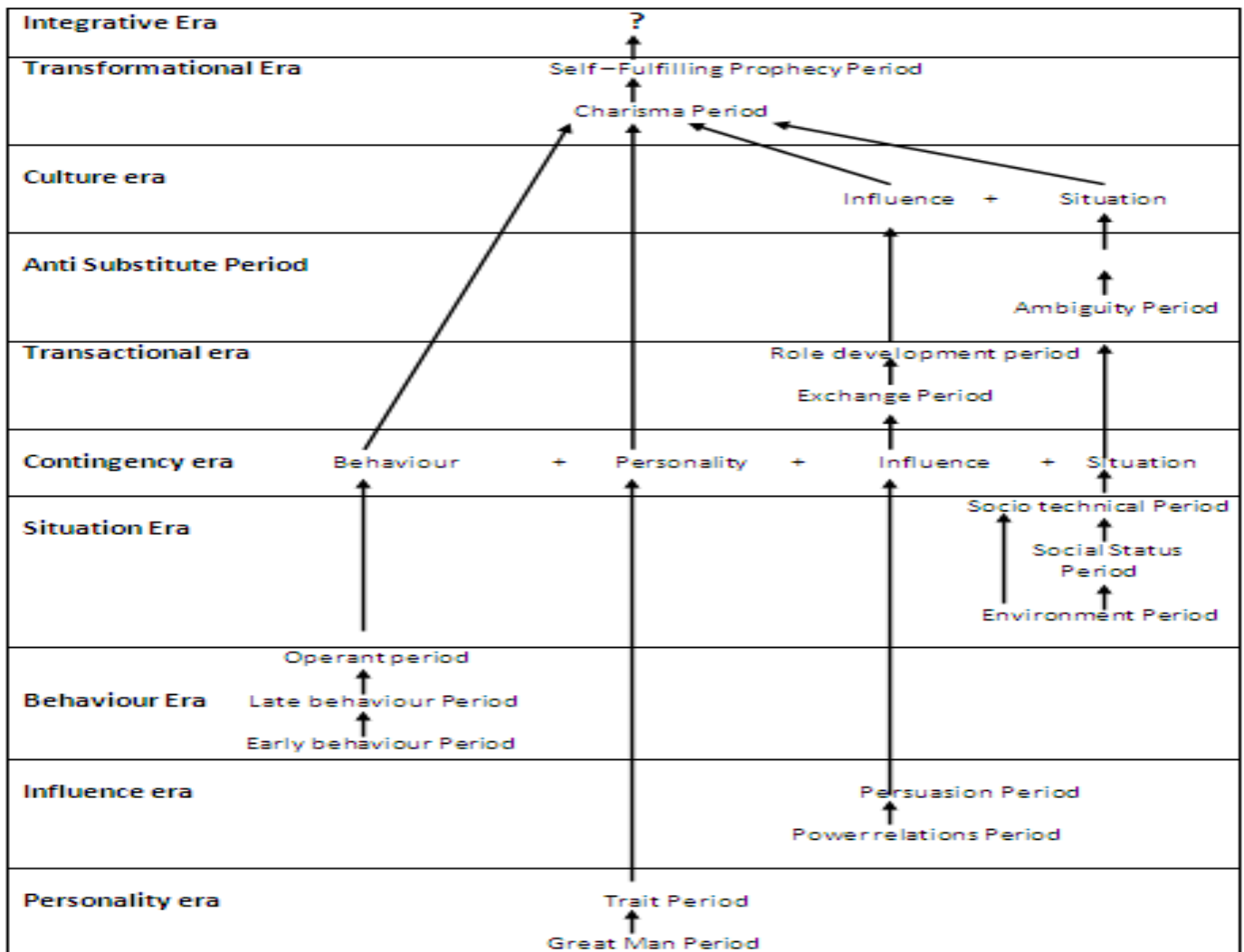


Figure 2.3: The Evolutionary Tree of Leadership Theory

(Source: Van Seters & Field, 1990)

2.6.1 The Autocratic Leadership Style

Autocratic leaders like to keep the decision-making power to themselves. They choose to make the majority of decisions on their own. These leaders prefer to keep control of and take responsibility for all projects assigned to them; this means that they are less likely to delegate the decision-making to others. They prefer a clear structure and set rigid expectations. These leaders rarely consult with others and are not very interested in developing their own skills or those of their employees. This type of leadership is

one of the oldest leadership styles, but it still exists because there are many situations in which it works best (MTD Training, 2010). Autocratic leaders rely on threats and punishment to influence their staff. Autocratic leaders do not trust employees and do not allow their input. They expect employees to obey orders without giving any explanations, and base their motivation scheme on a structured set of rewards and punishments. Nonetheless, this leadership style is not all bad and can sometimes be effective in cases where newly-hired employees do not know which procedures to follow, or where effective supervision through detailed instructions is required. You can come across the autocratic style in severe cases where employees do not respond to any other leadership style, as well as where high-volume production is required on a daily basis, or in situations where there is limited time to make a decision. Additionally, it can occur in poorly managed areas where an employee can challenge a leader, or in situations where work needs to be coordinated with another department or organization. The following leadership styles fall under the autocratic style:

Task-oriented leaders:

A highly task-oriented leader focuses only on getting the job done. He will actively define the work and the roles required, put structures in place, plan, organize and monitor, as in a military context. An example of such a leader is Florence Nightingale (Murphy, 2005).

Charismatic leaders: Leaders force their personalities and interpersonal skills to articulate an appealing vision linking the present with the future, and are said to have an extraordinary effect on followers and subordinates without resorting to any formal authority. This type of leader is found in most manufacturing engineers and big organizations. Examples of such leaders are Martin Luther King Jr. (Carson, 1987), George Washington, Franklin D. Roosevelt, Bill Clinton, and Steve Jobs. They are often experts in their field, but their unique power comes from conveying presence, charm, and a sense of accomplishment. In a way, charisma is the ultimate skill of great leadership, excellent management, and high team performance.

Transformational leaders: This is about having the skills and personal qualities to be able to recognize the need for change and being able to identify appropriate courses of actions to bring it about (Kuhnert & Lewis, 1987). Examples of such leaders are General C. Everett Koop (Bass & Riggio, 2006) and Barack Obama.

2.6.1.1 Advantages of Autocratic Leadership Style

There are several benefits to this type of leadership, including a reduction in stress for the leader, because he or she knows that they are in complete control. Decision-making is quick because there is no need for a long consultation process before moving ahead. These leaders allow for fast decision-making and can be useful for keeping employees motivated. Making decisions quickly tends to make employees more productive (Hackman & Johnson, 2009). Therefore, for unmotivated employees, this can be a helpful style.

Quick Decisions: An autocratic style of leadership can be effective in work environments where decision-making needs to be done quickly. The sole responsibility rests with the leader, and s/he makes the decision without the need to consult others. If a business faces constant change, the autocratic leader is able to respond in a way that prevents the business from falling behind the competition and keeps up with customer demand.

Close Oversight: In an autocratic work environment, the leader typically keeps a close watch on the activities of the workers. This eliminates the tendency for workers to "slack off" that may occur with more lenient management styles. This results in increased productivity and speed, as well as quickly identifying workers who fall behind, and taking corrective measures. Quality may improve, because the constant monitoring of employees' work means that time-wasting and the need to waste resources are no longer issues.

Total Control: Autocratic leadership can work well for managers who prefer complete control over an operation. Because the outcome is totally in his hands, the manager does not experience the stress of having to rely on help from outside his work area to complete the project or task. For this type of individual, having complete authority can actually result in reduced stress since he has complete control over his own fate.

Streamlined Work Process: Because one individual has complete control over an operation, there is less of a need for layers of management or bureaucracy. This can make for a more efficient operation, as fewer people are involved in the decision-making process. The manager can quickly identify areas of inefficiency or

malfunction before they turn into major problems. For example, if allocating too much money for the marketing aspect of a project, the manager can spot this quickly, to implement a less expensive marketing technique.

2.6.1.2 Disadvantages of Autocratic Leadership Style

This type of leadership is not good in the long term. It can de-skill the workforce, making them disheartened and too reliant on the leader. It can also have detrimental effects on the workforce as a whole. If the leader solely makes all decisions, team members do not have the chance to develop their decision-making skills or other leadership skills. Although the control provided can reduce the leader's stress in the short term, in the end it will increase because of the constant need to bear all responsibilities all the time. Employees will also stop feeling invested in the company or its services if they feel they are not making any impact on its decisions. This can lead to reduced motivation and morale, and the team's ability to function becomes entirely reliant upon the leader.

2.6.1.3 Where the Autocratic Style is Most Applicable

The circumstances that favour the autocratic style of leadership are:

- Short-term, complex, technical or urgent projects.
- Low-skilled positions with monotonous tasks that can lead to low motivation.
- Where there is high turnover of employees, so keeping organizational knowledge in a leader is important.

2.6.2 The Democratic Leadership Style

Democratic leaders share the decision-making as well as the resulting responsibility with the team members. They seek feedback and prioritize the team members' development. Democratic leadership is also known as participative leadership, and encourages decision-making from different perspectives; members of the group take a more participative role in the decision-making process, thus leadership may be emphasised throughout the organization. This leadership style uses two important factors that are most effective and can lead to higher productivity and better contribution from group members (MTD training, 2010):

Consultative: Process of consultation before decisions are taken.

Persuasive: Leader takes a decision and seeks to persuade others that the decision is correct.

The team shares the responsibility for making the decisions, making changes, and meeting deadlines. The leader delegates a great deal of work, letting others have a say in what portion of work they take on. The leader seeks continual feedback and looks for opportunities for development for both himself and his team (Hackman & Johnson, 2009). This is a popular style because, when executed well, it creates a harmonious, productive, evolving workforce. Since group members are encouraged to share their thoughts, democratic leadership can lead to better ideas and extra creative solutions to problems. Researchers have found that the democratic leadership style may help increase motivation and involvement as group members feel ownership of the firm and its ideas. It can also improve sharing of ideas and experiences within the business. However, the democratic leadership style can only work best in situations where group members are experienced, proficient and willing to share their knowledge. Furthermore, sufficient time is required to allow people to share their ideas and develop an action plan before making a final decision. The downside of this style is in situations where responsibilities are unclear or in circumstances where time is of importance. This can lead to communication failures and incomplete projects. The following leadership styles fall under the democratic style:

People-oriented: This style of leadership is the opposite of task-oriented leadership: the leader totally focuses on organizing, supporting and developing the people in the leader's team.

Corrective Leadership: Empowers staff to facilitate collaborative and synergism, working with and through other people instead of bowing to authoritarianism.

Change Leadership: Endorses (approves) alteration. Beyond thinking about individuals and an individual organization, single problems and single solutions; rethinking systems to introduce change to parts of the whole and their relationship to one another.

Intelligence Leadership: To navigate the future by embracing ambiguity and reframing problems as opportunities. A proactive stance in taking their organizations into uncharted territory.

2.6.2.1 Advantages of Democratic Leadership Style

Democratic leadership results in dedicated, loyal employees who are willing to work hard to deliver results and to share the credit for getting those results. Team members are often more dedicated to their work because they feel that they have had input not only into *what* was done, but *how* it was done (Hackman & Johnson, 2009). They take ownership of a situation because it has been handed over to them, and they are usually willing to work harder because they know that they will share the credits. The sharing of credit also goes a long way to reducing the amount of internal politics because there is less need for competition.

If employees understand that the whole team shares responsibility for the work, they are less likely to cover up mistakes and more likely to be honest about problems they see in the process. Since feedback is given and received continually, in the long term, decision-making is naturally improved. Overall, the work environment will tend to be more positive and collaborative. There also tends to be a lower turnover because employees are investing in the outcomes and know that their employer will invest in their own development.

2.6.2.2 Disadvantages of Democratic Leadership Style

The fact that everyone is continually consulted in the decision-making process means that decision-making is a slow process. If there is high-pressure, or a need for fast decisions, this style will not work. In fact, this forces the leader to change to an autocratic style in some cases, which could cause some resentment. This kind of style requires that the leader must work at creating a balance between allowing others to take the lead and keeping control of the overall process. Since everyone is involved in the decision-making process, decisions can take a long time to make.

2.6.2.3 Where Democratic Leadership Style is Most Applicable

The democratic style is useful when it is important that members of the team contribute their own creativity and knowledge to the process. When you are ready to prioritize training and team development and take the time needed to give everyone a chance to contribute, this style can produce great results, it is a good way to create a new team of people who have not worked together before and need to get in gear quickly.

2.6.3 The Bureaucratic Leadership Style

Bureaucratic leadership works well in environments where following the rules is more important than creativity or thinking outside the box. In a bureaucratic leadership arrangement, the focus for the leader is on making certain that employees follow the rules with consistency. This style became very popular when the industrial era began, because factory work requires specific rules and procedures in order to ensure consistent quality and to protect the health and safety of the workers. In this leadership situation, the leader gains authority more from his position than for other reasons.

Employees are rewarded for being able to follow the rules and producing consistently, rather than for innovation or brainstorming. The environment tends to be more formal, with clear distinctions between the leaders and their employees. This setup is common in older, larger organizations, or in organizations that have not yet evolved their organizational structure for some reason. Bureaucratic leaders manage “by the book” (Weber, 1947), with everything done according to procedure or policy, and if it is not covered by the book, it is referred to the next level above.

One of the leadership styles that falls under the bureaucratic style is the transactional leadership style. The transactional leader works through creating clear structures, whereby it is clear what is required of their subordinates, and the rewards that they get for following orders. There is rarely mention of punishments, but it is well understood and a formal system of discipline is usually in place. This includes the allocation of work, making routine decisions, monitoring performance and interacting with other functions within the organization (Kuhnert & Lewis, 1987).

2.6.3.1 Advantages of the Bureaucratic Leadership Style

Bureaucratic leadership helps promote consistent output and quality, can cut costs, and can improve productivity in some environments. When consistent output is required and quality is of the utmost importance, this style can be very useful. It is also a good choice when work is repetitive but it is important to follow the exact same way each time. When tasks are highly segregated and dependent on each other, the bureaucratic style can work well. It also helps in situations where cutting costs and improving productivity are priorities, in addition to situations where there is a need to measure or evaluate.

2.6.3.2 Disadvantages of the Bureaucratic Leadership Style

When there are no differences in the work from day to day and no choice in the work performance, the environment can be very dehumanizing to individuals. Employees are expected to perform their duties repetitively without any personal creativity, which can harm an organization in the end. Over time, bureaucratic leadership can dehumanize and discourage the workforce. With no investment in training, you can also end up without a well-skilled workforce. Due to the usual strict division of labour, there can also be the tendency for bureaucratic leaders to become territorial and to see other leaders as rivals rather than colleagues. Politics and excessive, restrictive policies can result in this work environment. These characteristics also tend to result in communication problems since there are so many distinct segments.

2.6.3.3 Where the Bureaucratic Leadership Style is Most Applicable

If the desire is to produce the image of regulation and control, the bureaucratic leadership style is a good choice. It is also a natural choice for organizations where there need to be rigid controls over health and safety measures.

2.6.4 The Charismatic Leadership Style

With this style, the main characteristic is the leader's ability to inspire others. Weber (1947) defined *charisma* as being "set apart from ordinary people and treated as endowed with supernatural, superhuman, or at least specially exceptional powers or qualities... regarded as of divine origin or as exemplary, and on the basis of them the individual

concerned is treated as a leader”. They do so through commitment to a vision they stimulate to communicate with their team. It is possible that the leader will actually have to create the vision as well, requiring the ability to generate excitement in others about new, possibly risky ideas. As the name implies, the charismatic leadership style is based on the leader’s ability to inspire and influence the actions of others. It takes a great deal of energy to be a charismatic leader because it requires taking advantage of every opportunity to ‘sell’ the team on the vision and mission of the organization. Some members of the team will be easy to inspire, while others will be ‘sold’ more slowly or, unfortunately, not at all. This style depends on the leader’s ability to build trust with team members by demonstration of personal integrity. A widely accepted framework is that of Conger and Kanungo (1998), who explained that charismatic leadership is typified by four key characteristics: possessing and articulating a vision, willingness to take risks to achieve the vision, exhibiting sensitivity to follower needs, and demonstrating novel behaviour.

2.6.4.1 Advantages of Charismatic Leadership Style

This type of leadership is excellent for encouraging creativity and forward-thinking decision-making. When a charismatic leader is successful, the team is powerful. They are committed, loyal, and willing to deliver beyond their expectation. This type of leader includes and encourages each member of the team and focuses on the development of each member’s skill set. The team can be wildly creative and generate interesting, forward-thinking solutions to existing or new problems. Each team member will tend to become a leader on his own by helping their fellow teammates and encouraging them to remain committed to the vision as well.

2.6.4.2 Disadvantages of Charismatic Leadership Style

The charismatic leader has to invest a great deal of time in fostering his relationships with the team in order to use this style. This type of leadership requires a great deal of time for the leader. He or she must constantly be responsible for representing the vision of the organization and embodying it in all that they do. It can be stressful to do so, especially when it takes time away from other responsibilities that are required in their position. In addition, since so much relies upon the personal relationships that the leader has with the team members, there is little room for making normal human errors. Mistakes that would go

unnoticed in other leadership styles could be detrimental to the function of a charismatic leader.

2.6.4.3 Where the Charismatic Leadership Style is Most Applicable

When commitment to a vision is the most important aspect of a teams' functioning, the charismatic leadership style can work well, particularly if there is the need to work quickly, work hard, and get a new company, division, or product off the ground. It can also be helpful to rejuvenate an organization where team members have gotten stale or disheartened. When companies seek to recreate their image in the face of the public, they will often put forth a charismatic leader as the representative of the 'new' element.

2.6.5 The Laissez-Faire Leadership Style

Lewin et al. (1938) first described the laissez-faire leadership style. The laissez-faire style is sometimes described as a 'hands-off' leadership style because the leader provides little or no direction to the followers. The characteristic of the laissez-faire style allows followers to have complete freedom to make decisions concerning the completion of their work. It gives all authority and power to the followers to determine their goals, make decisions, and resolve problems on their own. The laissez-faire leader is one who believes in freedom of choice of employees, leaving them alone to do as they want. The basis for this style of leadership is twofold. First, there is a strong belief that the employees know their jobs best so they should be left alone to do their jobs. Second, the leader may be in a political, election-based position and may not want to exert power and control for fear of not being re-elected. Such a leader provides basic but minimal information and resources. There is virtually no participation, involvement, or communication within the workforce. Understanding of job requirements, policies, and procedures is generally exchanged from employee to employee. Because of this, many processes are out of control. No direction is given and the laissez-faire leader functions in a crisis or reaction mode. If there are goals and objectives, the employee agreement or commitment assumes that, even if goals and objectives are shared, there is rarely a defined plan to accomplish them. Laissez-faire management or leadership can only lead to anarchy, chaos, inefficiency and lack of control, and is usually dismissed as useless. The overall effect of laissez-faire leadership seems to be negative. Nevertheless, there may be an aspect of such a style of leadership that is very positive. Hersey, Blanchard, and Johnson (1999) propose that leaders do not

have just one style of leadership, but rather have many varying styles depending upon the situation.

The following leadership styles fall under the laissez-faire style:

Servant leadership: This refers to anyone (whether having a formal leadership title or not) who leads by meeting the needs of others or of his or her team. This leadership style is based on strong values and personal integrity. It is quiet, without fanfare.

Pedagogical Leadership: A paradigm shift from leader/teacher-centred "orientation" to an interactive, connective organizational system using a democratic learning and communicative style.

Bridging leadership: Fostering synergy (co-operative) and reinforcing behaviour and motivation using communication to create a climate of trust and confidence. Projection of confidence in the face of a difficult challenge.

2.6.5.1 Advantages of Laissez-Faire Leadership Style

This leadership style is positive when the employees are very responsible and in creative jobs where a person is guided by his own aspirations. In these cases, less direction is required so this style can be good. It is very useful in businesses where creative ideas are important. Advantages include that these leaders can “be effective in situations where group members are highly skilled, motivated and capable of working on their own” (Cherry, 2010).

2.6.5.2 Disadvantages of Laissez-Faire Leadership Style

This style has more disadvantages because usually it is the result of lack of interest, which has led the leader to adopt this style. It proves poor management and makes the employees lose their sense of direction and focus. The lack of interest of the management and leadership causes the employees to become less interested in their jobs and their dissatisfaction increases. A team member can dominate and take control, which could lead the team to make incorrect decisions and possibly have the team reprimanded, leading to negativity within the group, affecting the process and their motivation. This absence of leadership leads to nothing happening, which promotes ineffective leadership (McGuire & Kennerly, 2006).

2.6.5.3 Where Laissez-Faire Leadership Style is Most Applicable

- A group project requiring subject-matter expertise.
- Upper-level executives trusted to run major divisions or operational sections of a business.
- Routine or mundane tasks can be handled in a laissez-faire manner.
- Laissez-faire leadership can be used when the ultimate decision-maker is comfortable that he or she is surrounded by a talented and capable team of executives.

2.6.6 The Paternalistic Leadership Style

The paternalistic leadership style is adopted when a leader needs to regulate the conduct of those under his control in matters affecting them as individuals, as well as in their relationships to him and to each other. Here the leader acts as a ‘father figure’, makes decisions and may consult before making a decision. This leadership style uses power to control, protect, punish, and reward in return for obedience and loyalty from his employees, followers, or subordinates (Farh, Liang, Chou & Cheng, 2008). These leaders give more attention to the social needs and views of their workers. Managers are interested in how happy workers feel, and in many ways they act as a father figure (pater means father in Latin). They consult employees over issues and listen to their feedback or opinions. The leader will, however, make the actual decisions (in the best interests of the workers) as they believe the staff still need direction, and in this way it is still somewhat of an autocratic approach. This style is linked closely with Mayo’s Human Relation view of motivation, as well as the social needs of Maslow.

2.6.6.1 Advantages of Paternalistic Leadership Style

This style provides a huge movement towards the motivation of employees more than an autocratic style, since employees tend to feel that the leadership consider their welfare and thus do care for them more as people and not just like robots. There is increased loyalty of employees, with minimal turnover.

2.6.6.2 Disadvantages of Paternalistic Leadership Style

In case the paternal leader makes a bad decision, a dispute could grow among the followers, and there is a feeling of being let down as their credibility wanes, as does loyalty and low turnover. In case of dissent by employees, the moral and overall leadership style is affected, since the issue of employees and their general welfare is more important than any other kind of aspect within the dimensions of any leadership style and management approach. It also slows down decision-making.

2.6.6.3 Where Paternalistic Leadership Style is Most Applicable

This style of leadership is ideally useful in the following settings:

- Military establishment – where order and discipline are emphasized.
- Hospitals – where things need to be done in an orderly and timely manner.
- Governments – where there is a more formal and hierarchical structure.
- Social service agencies – where creative thinking is not required; and
- Educational institutions – where order and discipline are required.

2.6.7 Overview of the Leadership Styles

Leadership style is the combination of traits, skills, and behaviours leaders use as they interact with employees (Lussier & Achua, 2004). In order for one to favour a leadership style, one must understand where the leadership styles originated. Throughout the years, the topic of leadership has been debated. However, research indicates that certain characteristics or traits are inherent in leaders (Murphy, 2005).

Rensis Likert identified four main styles of leadership, in particular around decision-making and the degree to which people are involved in the decision.

- **Exploitive authoritative:** In this style, the leader has a low concern for people and uses such methods as threats and other fear-based methods to achieve conformity. Communication is almost entirely downwards and the psychologically distant concerns of people are partly ignored.
- **Benevolent authoritative:** When the leader adds concern for people to an authoritative position, a 'benevolent dictatorship' is formed. The leader uses rewards to encourage appropriate performance and listens more to concerns lower down the organization, even though what they hear is often overly

optimistic, being limited to what their subordinates think that the boss wants to hear. Although there may be some delegation of decisions made, major decisions are central.

- **Consultative:** The upward flow of information here is still cautious and rose-tinted to some degree, although the leader is making genuine efforts to listen carefully to ideas. Nevertheless, major decisions overall are centrally made.
- **Participative:** At this level, the leader makes maximum use of participative methods, engaging people lower down the organization in decision-making. People across the organization are psychologically closer together and work well together at all levels.

2.7 Theory of Leadership

According to research, the 1940s proffered leaders as maintaining certain traits. These traits were based on physical and personality characteristics, as well as intelligence and interpersonal skills (Steers, Porter & Bigley, 1996). Marquis and Huston (2000) associated the Great Man Trait Theory with that of the Aristotelian philosophy, which indicated that leaders were born and not made, and that depending on the need a leader would surface. The limitations of trait theory are that leaders cannot be developed through their skills and education (Murphy, 2005).

In contrast with trait theories, the behavioural methodology centred on the recognizable actions that made a person an effective leader (Wright, 1996). Personal behaviour theories discussed in the University of Michigan and Ohio State University studies identified two more styles of leadership: job-centred (task) and employee-centred (people). The job-centred (task-initiating structure) behaviour focuses on the leader taking control in order to get the job done, and the employee-centred (people-consideration) behaviour focuses on the leader meeting the needs of employees and developing relationships (Lussier & Achua, 2004). The findings in the Michigan study indicated that leaders who were highly employee-oriented allowed participation that fostered teams who are more productive. On the other hand, leaders who were more concerned about accomplishing tasks cultivated lower-producing teams. The findings from the Ohio State University study emphasized the consideration and initiating structure as the two underlying structures found in the University of Michigan study.

The Ohio State University study concluded that both structures were separate components, but if leaders were dedicated in both they could achieve higher results (Murphy, 2005). Research at the University of Iowa expounded on the studies above and identified two basic leadership styles: autocratic and democratic. These and other research studies asserted four (4) main leadership styles: concern for task, concern for people, directive leadership and participative leadership (Wright, 1996).

Fiedler (1967) explored the idea that there was not just one ultimate style of leadership for a given circumstance, but leaders would be more effective by varying their leadership style depending on the situations that faced them. Fiedler's model was based on leadership styles being either task- or relationship-oriented and the style used depended on whether the situation was one of leader-member relations, task structure or position power (Murphy, 2005). In the 1960s, Fred Fiedler advanced the first theory using the contingency approach; the contingency theory of effectiveness. The main idea of this early theory is that leadership effectiveness (in terms of group performance) depends on the interaction of two factors: the leader's task or relation motivation and aspects of the situation. The leader's task or relation motivation is measured through the least preferred co-worker scale (LPC). This scale asks leaders to recall a co-worker (previously or currently) they work with least well, and to characterize this individual with ratings on a series of 8-point bipolar adjectives (e.g., distant–cold). High LPC scores reflect positive descriptions of the least preferred co-worker, whereas low LPC scores evidence more negative perceptions. Fiedler argued that an individual with a high LPC score is motivated to maintain harmonious interpersonal relationships, whereas an individual with a low LPC score is motivated to focus on task accomplishment.

Hersey and Blanchard theorized that styles of leadership are determined by the employees' perceptions. Hersey and Blanchard's theory expounded on Fiedler's model by creating four (4) leadership styles: directing, coaching, supporting and delegating (Murphy, 2005). Building on the same principles of the contingency theories, House (1971) suggested that the path-goal theory influences and motivates an employee's views and opportunities. Employee contentment, accomplishment of goals and improved functioning derived from the leader's direction, training, guidance and support. Despite the findings of this research, Marquis and Huston (2000) disagreed and noted that situational theory focused on the situation rather than the interpersonal and intrapersonal factors.

The situational theory tends to focus more on the behaviours that the leader should adopt, given situational factors (often about follower behaviour), whereas contingency theory

takes a broader view that includes contingent factors about leader capability and other variables within the situation.

Listed below is a brief overview of leading and well-known theories:

- Great Man Theory
- Trait Theory
- Behavioural Theories
 - Role Theory
 - The Managerial Grid
- Participative Leadership
 - Lewin's leadership styles
 - Likert's leadership styles
- Situational Leadership
 - Hersey and Blanchard's Situational Leadership
 - Vroom and Yetton's Normative Model
 - House's Path-Goal Theory of Leadership
- Contingency Theories
 - Fiedler's Least Preferred Co-worker (LPC) Theory
 - Cognitive Resource Theory
 - Strategic Contingencies Theory
- Transactional Leadership
 - Leader-Member Exchange (LMX) Theory
- Transformational Leadership
 - Bass' Transformational Leadership Theory
 - Burns' Transformational Leadership Theory
 - Kouzes and Posner's Leadership Participation Inventory
- Skills Theory
- Servant Leadership Theory

In addition to the above, worth mentioning are adaptive, authentic, and appreciative.

2.7.1 The Great Man Theory

Early research by Zaccaro (2007) includes leadership by investigating the personal qualities of leaders. Two schools of thought emerged, as philosophers debated the importance of the great man versus the situations in which these super-men found themselves in their times of leadership. The seeds for our modern-day contest of

theories can be traced back to the Scottish scholar Thomas Carlyle (1795-1881), the prominent philosopher who coined the idea of the 'great man'. According to Carlyle, some people are born with more leadership abilities than others. These men and women possess great or heroic traits and as such, should rightly hold positions of leadership in social organizations. This type of leader is reckoned as a charismatic, who is a caring autocrat. The 'great man' view of leadership was effective in past leaders (usually male), considered to have achieved their success through possession of a range of distinguishing characteristics and traits. At the heart of this approach was an assumption that these people were born to be leaders and excelled by virtue of "extraordinary courage, firmness or greatness of soul, in the course of some journey or enterprise" (Adair, 1989).

The main idea behind the great man theory is that leaders cannot be made, for they are born leaders (Galton, 1869). The supporters of the great man theory concentrated mainly on well-known historical political and military leaders. They also claimed that unexpected events, like for instance war, could also cause sudden rise of the leader. Among these, one could list Napoleon Bonaparte, George Washington, or even Adolf Hitler, who managed to gain the support of the majority of the population. But even centuries earlier, humankind witnessed historical events used to support the concept of the great leader theory, like for instance Moses who was seen as the only one capable of freeing the Israelites. Supporters perceived leaders, who fall into the group of the great man, not only as heroic, but also as mythic, possessing specific traits. On the other hand, because people possess different traits, it was impossible for the great man theory advocates to establish a universal model of the great man, characterized by common values and the same number of traits. Nevertheless, those who support trait theory believe that a set of universal traits of leaders can be established and people who make good leaders have the right, or sufficient, combination of traits. The great man theory held sway in the minds of those seeking to define that most elusive quality: leadership. Because there was consensus that leaders differed from their followers, and that fate or providence was a major determinant of the course of history, the contention that leaders are born, not made, was widely accepted, not only by scholars, but also by those attempting to influence the behaviour of others. Bass (1990) explains that many shared the belief of sociologist Jerome Dowd that individuals in every society possess different degrees of intelligence, energy, and moral force, and in whatever direction the masses may be influenced to go, they are always led by the superior few. Current

proponents of this theory point to Lee Iacocca, John F. Kennedy, Martin Luther King, and Douglas MacArthur as examples of great men whose innate abilities connected somehow with situational forces. The great man theory has thrived due to the increased interest in the behavioural sciences, and to the claim that if not everyone, then many, can be trained to become leaders through enhancing their abilities, for “nurture is far more important than nature in determining who becomes a successful leader” (Bennis & Nanus, 1997). One could say that one of the reasons behind abounding the great man and trait theories was also the fact that instead of concentrating on effective leadership it looked into what could possibly make a great leader. It fully focused on the leader, omitting the importance of the followers who might look for certain traits in their leaders and abound them if failed to find. Among those desired traits are honesty, inspiration, looking forward, competency and intelligence.

2.7.2 The Trait Leadership Theory

The trait theory of leadership, although similar to the great man theory, focuses on the personality, and the intellectual and physical traits that distinguish leaders from non-leaders. Early research on leadership was based on psychological factors whereby people inherit their characteristic traits. Attention was paid thus to discovering the traits of leaders, often by studying real-life successful leaders. The underlying assumption was that, if other people could find these traits, then they too could become great leaders (Stogdill, 1948). Studies of such traits have shown only minor orientation differences between leaders and followers. Research has shown that leaders tend to be somewhat larger, brighter, and better adjusted than their followers (Stogdill, 1948). Following are various researchers’ lists of major leadership traits and characteristics:

Stogdill (1957, 1974): Masculinity, adjustment, dominance, and extroversion; nervous and physical energy, a sense of purpose and direction, enthusiasm, friendliness, integrity, technical mastery, decisiveness, intelligence, teaching skills, and faith.

Mann (1959): Alertness, insight, responsibility, initiative, persistence, self-confidence, and sociability; an above average education, activity in social organizations, and high moral and ethical standards.

Lord, DeVader and Alliger (1986): Persistence, insight, initiative, and self-confidence.

Understanding leadership began with the great man theory. Trait theory connects the traits with successful leaders and then defines key personalities. The three main

assumptions of trait theory are: 1) leaders are born, not made; 2) some traits are particularly suited to leadership; and 3) people who make good leaders have the right combination of traits ("Leadership Theories", Northouse, 2007.).

Trait researchers guided their work following three main questions: 1) what are the common traits underlying all great leaders? 2) Can people's leadership potential be predicted based on these appropriate traits? 3) Can people learn to become effective leaders? (Chamorro-Premuzic, 2007, p.146). The early trait studies by Yukl (2001) which grew from these guiding questions "attempted to identify physical characteristics, personality traits, and abilities of people who were believed to be natural leaders"(Yukl, 2001, pp. 175-207).The research was pioneered by Binet and Simon, which reached its climax with Ralph Stogdill in 1948 (Berndt, 2003, pp. 3-4). Stogdill "completed two comprehensive reviews by synthesizing more than 200 studies of the trait approach. His two surveys identified a group of traits that were positively associated with leadership such as intelligence, self-confidence, initiative and persistence" (Liu & Liu, 2006 pp.8).Stogdill's extensive research helped him develop the main key traits and skills found in leaders. The following table 2.1 illustrates Stogdill's trait studies from 1949 through 1970:

Table 2.1: Leadership Skills and Traits (Source: Stogdill, 1974)

TRAITS	SKILLS
<ul style="list-style-type: none"> • Adaptable to situations • Alert to social environment • Ambitious and achievement-orientated • Assertive • Co-operative • Decisive • Dependable • Dominant (desire to influence others) • Energetic (high activity level) • Persistent • Self-confident • Tolerant of stress • Willing to assume responsibility 	<ul style="list-style-type: none"> • Clever (intelligent) • Conceptually skilled • Creative • Diplomatic and tactful • Fluent in speaking • Knowledgeable about group task • Organized (administrative ability) • Persuasive • Socially skilled

2.7.3 The Behavioural Theory

In the 1950s researchers shifted their focus to the behaviour requirement of leadership rather than characteristics. Approaches merged to examine how effective leaders behaved rather than who effective leaders were. Unlike the trait approaches, behavioural approaches opened the door for training leaders. Rooted in behaviourism, this leadership theory focuses on the actions of leaders, not on mental qualities or internal states. According to this theory, people can learn to become leaders through teaching and observation. Determining specific behaviours to identify leaders made it possible to design programmes that implanted these behaviours in targeted individuals, implying that leaders can be trained to focus on the way of doing things.

There were two major behavioural studies done by Ohio State University (1940) and University of Michigan (1950). A group of people from Ohio State University developed a list of 150 statements from their generated responses that included 1800 statements. The list was designed to measure nine different behavioural leadership dimensions. The resulting questionnaire was better known as the LBDQ or the leaders behaviour description questionnaire. After compiling and analyzing the results, the study concluded that there are two groups of behaviours, which strongly correlate. These are defined as consideration (people-oriented behavioural leaders) and initiating structure (task-oriented leaders).

2.7.3.1 Structure-based Behavioural Theories

Focuses on the leader-instituted structures. The task concerns leaders who focus their behaviours on the organizational structure and the standard operating procedures (SOPs) and they like to keep control. Task-oriented leaders concern themselves with staff motivation, although it is not their main concern. They will favour behaviours that are in line with initiating, organizing, clarifying and information gathering.

2.7.3.2 Relationship-based Behavioural Theories

Focus on the development and maintenance of relationships. People-oriented leaders are focusing their behaviours on ensuring that the inner needs of the people are satisfied. Thus, they will seek to motivate their staff through emphasizing the human relations. People-oriented leaders focus on both the tasks and the results;

they try to achieve them through different means. Leaders who are people-focused will have behaviours that are in line with encouraging, observing, listening and coaching and mentoring. Led by the famous organizational psychologist, Dr Rensis Likert, the leadership studies at the University of Michigan identified three characteristics of effective leadership, two of which had been previously observed in studies conducted at Ohio State University. The study showed that task- and relationship-oriented behaviours were not of major significance within the world of organizational psychology. However, it was the third observation that introduced a new concept, one of participative leadership.

2.7.3.3 Role Theory: Also a Part of the Participation Style

Everyone has internal schemas about the role of leaders, based on what is read, discussed and so on. Subtly these expectations are sent to their leaders, acting as *role senders*, for example through the balance of decisions taken upon themselves and the decisions left for the leader to make. Leaders become influenced, picking up these signals, particularly if they are sensitive to the people around them, and eventually they will conform, playing the leadership role placed upon them. Within organizations, there is much formal and informal information about what the leader's role should be, including 'leadership values', culture, training sessions, modelling by senior managers, and so on. These and more (including contextual factors) act to shape expectations and behaviours around leadership. *Role conflict* can also occur when people have differing expectations of their leaders. It also happens when leaders have different ideas about what they should be doing vs. the expectations placed upon them. Role expectations of a leader can vary from very specific to a broad idea within which the leader can define their own style. When role expectations are low or mixed, then this may also lead to role conflict.

2.7.3.4 Managerial / Leadership Grid

Other behavioural researchers found that leadership is comprised of two different kinds of behaviours: task behaviours and relationship behaviours (Hemphill & Coons, 1957; Blake & Mouton, 1964; Fiedler & Chemers, 1974; Stogdill, 1974). The idea of the most relevant studies regarding these two types of behaviours concentrates, therefore, on the managerial grid. This is a two-dimensional view of

leadership styles; developed by Blake and Mouton (1964), which displays on two axes different types of leadership behaviour;

Concern for Production – a manager who has high concern for production is task-oriented and focuses on getting results and accomplishing the imminent task.

Concern for People – a manager who has high concern for people avoids conflicts and strives for friendly relations with subordinates.

On the vertical axis is concern for people, while on the horizontal axis is concern for production. Management who are deficient in both these traits are called impoverished management. Management who are deficient in concern for production, but are sufficient in concern for people, are called country club management: characterized by a friendly atmosphere but with not so much emphasis on getting the job done. Authority-compliance management is management sufficient in concern for production but deficient in concern for people; people are not taken much into account, while the emphasis remains on keeping to schedule and quality control. Management where the extent of both these axes is found somewhere in the middle, is aptly called middle of the road management, in which boundaries are not pushed to get the most out of people or production. Finally, the most effective management according to Blake and Mouton's schema is team management, in which the twin concerns for people and production are both held paramount, and leader and subordinates remain dedicated to getting the job done to the best of their abilities (Blake & Mouton, 1964; 1978; Reddin, 1967; 1970; 1973; 1987; Barge, 1994).

Seven key behaviours associated with the managerial grid model are:

1. Initiative - Being at the forefront of action,
2. Inquiry - Seeking and testing information to further one's own understanding,
3. Advocacy - Communicating your opinions and ideas with conviction,
4. Decision - Identifying possible options and consequences and acting on one,
5. Conflict resolution - confronting disagreements and reaching a resolution,
6. Critique - Using previous experience to anticipate how behaviours have an effect on actions, and

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7. Resilience - Understanding how problems influence the ability to move forward.

2.7.4 The Participative Leadership Theory

Participative style involves the leader including one or more employees in the decision-making process (determining what to do and how to do it). However, the leader maintains the final decision-making authority. Using this style is not a sign of weakness; rather it is a sign of strength that your employees will respect. This style is normally used when part of the information is with the leader, and your employees have the other parts. Notice that leaders do not know everything and that is why they employ knowledgeable and skillful employees. Using this style is of mutual benefit; it allows employees to become part of the team and allows the leader to make better decisions.

2.7.4.1 Lewin's Leadership Styles

Kurt Lewin was a German-American psychologist; commonly regarded as one of the founders of modern social psychology, and considered responsible for the behavioural theory of leadership. He focused on the observable behaviours that make a leader effective. He was hoping that behavioural theories would provide definitive answers, and make it possible to train people not otherwise endowed to be leaders, and to make existing leaders better leaders (Lewin, Lippitt & White, 1939). Lewin focused his attention on the behaviour of individuals in leadership positions for groups and organizations. His position was very different from that of proponents of the great man and trait theories. Behavioural theories of leadership thus do not seek inborn traits or capabilities. Rather, they look at what leaders actually do. Behavioural theory is a big leap from trait theory, in that it assumes that not only may leadership capability be inherent in a person, but it can also be learned. Other behavioural researchers such as Hemphill and Coons (1957), Blake and Mouton (1964), Fiedler and Chemers (1974), and Stogdill (1974) found that leadership is comprised of two different kinds of behaviours: task behaviours and relationship behaviours.

2.7.5 Situational Theory

The situational leadership model is a leadership model developed in the late 1960s by Ken Blanchard and Paul Hersey. The model essentially says that the leadership method one employs depends on the situation. According to Paul Hersey, situational leadership is based on interplay among the amount of 1) Direction (task behaviour) a leader gives, 2) Socio-emotional support (relationship behaviour) a leader provides and 3) "Readiness" level that followers exhibit on a specific task, function, activity, or objective that the leader is attempting to accomplish through the individual or group.

2.7.5.1 Hersey and Blanchard's Situational Leadership

Hersey and Blanchard (1999) suggested that leaders should adapt their style to the follower's development style (or 'maturity'); based on how ready and willing the follower is to perform required tasks (competence and motivation).

Four leadership styles (S1 to S4) that match the development levels of followers. The four styles suggest that leaders should put greater or less focus on the task in question and/or the relationship between the leader and the follower, depending on the development level of the follower.

S1: Telling / Directing; Leader: High task focus, low relationship focus

S2: Selling / Coaching; Leader: High task focus, high relationship focus

S3: Participating / Supporting; Leader: Low task focus, high relationship focus

S4: Delegating / Observing; Leader: Low task focus, low relationship focus.

2.7.5.2 Vroom and Yetton's Normative Model

Vroom and Yetton (1973) took the earlier generalized situational theories that noted how situational factors cause almost unpredictable leader behaviour and reduced this to a more limited set of behaviours. This theory says that, "decision acceptance increases the effectiveness of action" and "Participation increases decision acceptance".

The 'normative' aspect of the model is defined more by rational logic than by long observation. The model is most likely to work when there are clear and accessible opinions about decision quality, importance and decision acceptance factors. However, these not always known with any significant confidence. Vroom and

Yetton defined five different decision procedures. Two are autocratic (A1 and A2), two are consultative (C1 and C2) and one is group-based (G2).

A1: Leader takes known information and then decides alone.

A2: Leader gets information from followers, and then decides alone.

C1: Leader shares problem with followers individually, listens to ideas and then decides alone.

C2: Leader shares problems with followers as a group, listens to ideas and then decides alone.

G2: Leader shares problems with followers as a group and then seeks and accepts consensus agreement.

2.7.5.3 House's Path-Goal Theory of Leadership

Leaders who show the way and help followers along a path are effectively 'leading'. This approach assumes that there is one right way of achieving a goal and that the leader can see it and the follower cannot. This casts the leader as the knowing person and the follower as dependent. It also assumes that the follower is completely rational and that the appropriate method selected deterministically depends on the situation. House and Mitchell (1974) described four styles of leadership:

- **Supportive Leadership:** Shows concern for the welfare of followers and creates a friendly working environment. This approach is best when the work is stressful, boring or hazardous.
- **Directive Leadership:** Providing guidance along the way. This approach is best when there are schedules of specific work to be done at specific times. This method is used when the task is unstructured and complex and the follower is inexperienced.
- **Participative Leadership:** Consults and considers opinions while making decisions. This approach is best when the followers are experts, and their advice is both needed and able to be given.
- **Achievement-oriented Leadership:** Highly competitive, and a high standard of work is expected. The leader shows faith in the capabilities of the follower to succeed. This approach is best when the task is complex.

2.7.6 Contingency Theory

This theory sought to develop generalizations about formal structures that would fit the use of different technologies. It states that there is no best way to lead an organization or make a decision. This was put forward by Joan Woodward (1958), who argued that technologies directly determine organizational attributes such as formalization of rules, control span and centralization of authority. Other theorists like P.R. Lawrence and J.W. Lorsch argued that companies operating in less stable environments operate more effectively when decentralized. On the other hand, companies operating in more stable environments function more effectively if the decision-making is centralized and less reliant on mutual adjustment between various departments. In 1961, Burns and Stalker completed research where organizations operating in more stable environments tend to exhibit a more mechanistic organizational structure. Leaders should look at the contingencies of the environment and assess whether the organization is able to handle uncertainties of the environment. This theory may depend on the size of the organization, culture of the organization, difference among resources and operations, quality of the relationships, assumptions of managers about the employees, strategies, technologies used, and nature of the changes needed.

2.7.7 Fiedler's Least Preferred Co-worker (LPC) Theory

The least preferred co-worker scoring for leaders works by asking them first to think of a person with whom they have worked, that they would like least to work with again, and then to score the person on a range of scales between positive factors (friendly, helpful, cheerful, etc.) and negative factors (unfriendly, unhelpful, gloomy, etc.). A high LPC leader generally scores the other person as positive and a low LPC leader scores them as negative. High LPC leaders tend to have close and positive relationships and act in a supportive way, even prioritizing the relationship before the task. Low LPC leaders put the task first and turn to relationships only when they are satisfied with how the work is going. Below are three factors identifying leaders, members and the tasks:

- **Leader-member Relations:** The extent to which the leader has the support and loyalty of followers and relations with them are friendly and co-operative.
- **Task structure:** The extent to which tasks are standardized, documented and controlled.

-
- **Leaders' Position-power:** The extent to which the leader has authority to assess follower performance and give reward or punishment.

2.7.8 Cognitive Resource Theory

Formulated by Fred E. Fiedler and Joe Garcia in 1987, from the former's contingency model (1967) which asserted that leadership style depends upon the situation where there is a need for a leader. However, people who are task-oriented tend to view a person's worth in terms of the action taken during the situation. Those persons who emphasize the importance of human relations tend to view co-workers more favourably. These factors are evidence as to why Fiedler affirms that there is no ideal leader; every situation is different. When stress is involved, the ability to command forcefully becomes urgent. When there is a need for action in the face of stress, intelligence leads to too much deliberation and indecisiveness. Fiedler states that a leader uses his or her intelligence to formulate decisions, communicate to the group and then seek the support of the group. At any one of these points, stress may block the process. If a leader has poor relationships with the group, stress is more effective in blocking leadership. Based on this, Fiedler predicts that intelligence will be more of a factor when the stress level is low.

2.7.9 Strategic Contingencies Theory

Hickson et al. (1971) suggest that a leader depends on his problem-solving skills and a projective personality that is centre stage. Uncertainty is a driving force in Hickson et al.'s writing. According to them, there is a "*...lack of information about future events so that alternatives and their outcomes are unpredictable*" (Hickson et al., 1971, p.219). The theory helps to objectify leadership techniques, as opposed to relying on personalities.

2.7.10 Transactional Theory

The transactional style of leadership was first described by Max Weber in 1947 and then by Bernard Bass in 1981. This style is used most often as a basic management process of controlling, organizing, and short-term planning. The leader believes in motivating through a system of rewards and punishment. Here, the exchange between leader and follower takes place to achieve routine performance goals. The transactional

leaders overemphasize detailed and short-term goals, and standard rules and procedures. They do not make an effort to enhance followers' creativity and generation of new ideas. This kind of a leadership style may work well where the organizational problems are simple and clearly-defined. Such leaders tend not to reward, or to ignore, ideas that do not fit with existing plans and goals.

Transactional leaders are quite effective in guiding efficiency decisions aimed at cutting costs and improving productivity. Transactional leaders tend to be highly directive, and action-oriented. Their relationship with followers tends to be transitory and not based on emotional bonds.

The theory assumes that a simple reward system motivates subordinates. The only 'transaction' between leader and followers is the money received by the followers for their compliance and effort. This type of leadership is responsive and works within the static organization culture.

2.7.11 Leadership Member Exchange (LMX) Theory

In 1975, Dansereau, Graen and Haga developed the vertical dyad linkage model, which later was recognized as the leader-member exchange (LMX) Model. LMX theory (e.g. Graen & Uhl-Bien, 1995) postulates the need for high-quality personalized relationships between the leader and followers, in order to promote effectiveness in leadership. However, according to the social identity theory approach, these relationships are less effective in groups with high salience and strong identification (Hogg & Martin, 2003). LMX was also one of the first approaches that considered the followers' contribution in the leadership process (Schyns & Day, 2010). LMX theory can be defined as an exchange relationship because the idea behind it is that "followers follow because they get something from being followers" (Messick, 2005, p.82), that is, leaders give something to followers and the followers will therefore act in ways that will be beneficial to the leader. Messick (2005) describes five interrelated dimensions present in both sides of this exchange relationship: according to the author, leaders provide vision and direction to followers. At this point, reference is made to the concept of future work selves and later further explanation of expectations in the sense that a transformational leader will promote a future-oriented vision and direction and therefore influence the development of individual and collective work selves.

2.7.12 Transformational Leadership

James MacGregor Burns (1978) first introduced the concept of transformational leadership during his study of political leadership. He described it not as a set of specific behaviours, but rather an ongoing process by which "leaders and followers raise one another to higher levels of morality and motivation" (p.20). Transformational leaders offer a purpose that transcends short-term goals and focus on higher order intrinsic needs. Transformational leaders raise the bar by appealing to higher ideals and values of followers. In doing so, they may model the values themselves and use charismatic methods to attract people to the values and to the leader. There are four components of transformational leadership, which are:

- **Charisma or idealized influence:** This is the degree to which the leader behaves in admirable ways that cause followers to identify with the leader. Charismatic leaders display convictions, take stands and appeal to followers on an emotional level. This is about the leader having a clear set of values and demonstrating them in every action, providing a role model for their followers.
- **Inspirational motivation:** Leaders with inspirational motivation challenge followers with high standards, communicate optimism about future goals, and provide meaning for the current task. Followers need to have a strong sense of purpose if they are to be motivated to act.
- **Intellectual stimulation:** Leaders with this trait stimulate and encourage creativity in their followers. The leader's vision provides the framework for followers to see how they connect to the leader, the organization, each other, and the goal.
- **Individualized consideration:** The leader attends to each followers' needs, acts as a mentor or coach to the follower and listens to the follower's concerns. This also encompasses the need to respect and celebrate the individual contribution that each follower can make for the team. This approach not only educates the next generation of leaders, but also fulfils the individuals' need for self-actualization, self-fulfilment, and self-worth. It also naturally propels followers for further achievement and growth.

This theory creates widespread changes to a business or organization, which require long-term strategic planning, clear objectives, clear vision, leading by example, walking the walk, and efficiency of systems and processes.

2.7.13 Bass Transformational Leadership Theory

Bass (1985) defined transformational leadership in terms of how the leader affects followers, who tend to trust, admire and respect the transformational leader. Leaders transform followers in three ways: Increasing their awareness of task importance and value, getting them to focus first on team or organizational goals, rather than their own interests, and activating their higher-order needs.

Bass (1990) has recently noted that authentic transformational leadership is grounded in moral foundations that are based on four components; idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. Also three moral aspects; which are the moral character of the leader, the ethical values embedded in the leader's vision, articulation, and programme (which followers either embrace or reject), and the morality of the processes of social ethical choice and action that leaders and followers engage in and collectively pursue.

2.7.14 Burns Transformational Theory

Inspired by Burns' (1978) notion of the transformational leader, Bass (1985) extended and developed transformational leadership theory and placed it in the context of work organizations. In general, transformational leaders are those who have a strong sense of direction (vision), which they communicate in inspiring ways. They are charismatic, and elicit emotional responses and trust from followers. In addition to being charismatic, transformational leaders can raise follower self-confidence and self-efficacy (Shamir, House & Arthur, 1993), both by expressing confidence in followers and by providing training, coaching, and development opportunities. Although Bass (1990) considers charisma to be only one dimension of transformational leadership, there is substantial overlap in theory and research on charismatic and transformational leadership (see Shamir, House & Arthur, 1993) and both literatures inform this inquiry.

2.7.15 Kouzes and Posner's Leadership Participation Inventory

James Kouzes and Barry Posner developed a survey (The Leadership Practices Inventory) that asked people to select from a list of common characteristics of leaders, from their experiences of being followers; the seven top things they look for, admire and would *willingly* follow. In over twenty years, they managed to survey over seventy-five thousand people. The results of the study showed that people preferred the

following characteristics, in the following order: honest, forward-looking, competent, inspiring, intelligent, fair-minded, broad-minded, supportive, straightforward, dependable, co-operative, determined, imaginative, ambitious, courageous, caring, mature, loyal, self-controlled and independent.

2.7.16 Servant Leadership Theory

Servant-leadership, first proposed by Robert Greenleaf in 1970, is a theoretical framework that advocates a leader's primary motivation and role as service to others. Greenleaf wrote that this "simple fact is the key to [a leader's] greatness" (1970, p.2). A servant-leader's primary motivation and purpose is to encourage greatness in others, while organizational success is the indirect, derived outcome of servant-leadership. It challenges organizations to rethink the relationships that exist between people, organizations and society as a whole. The theory promotes a view that individuals should be encouraged to be who they are, in their professional as well as personal lives. This more personal, integrated valuation of individuals, it is theorized, ultimately benefits the long-term interests and performance of the organization. As phrased by Russell (2001), "Leaders enable others to act not by hoarding the power they have but by giving it away" (p.80). The organizational structure resulting from servant-leadership has sometimes been referred to as an "inverted pyramid", with employees, clients and other stakeholders at the top, and leader(s) at the bottom. Exemplary followers, a product of delegated decision-making, is a further example of servant-leadership's inverse nature, "another type of leader turned inside out" (Sarkus, 1996, p.28). Because servant leadership breaks away from the classic organizational pyramid and promotes flexible, delegated organizational structures, many behavioural scientists see it as a forward-looking, post-industrial paradigm for leadership (including Lee & Zemke, 1993; Biberman & Whitty, 1997).

Servant-leadership, therefore, emphasizes core personal characteristics and beliefs over any specific leadership techniques. Some of the attributes of this leadership are listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to growth of people and building community.

2.8 Views of Leadership

Consequently, according to Lee and King (2001), provided below is a summary of the seven views of leadership:

- **The Genetic View:** Some people are born with leadership talents and others are not. Only certain people can learn to lead effectively; they are naturals. Nothing can be done to those who do not have inborn talent.
- **The Learned View:** If you study leadership carefully and practise, you can learn to be an effective leader, no matter who you are. In a sense, this is the opposite of the genetic view. This view is common in the military and among leadership development professionals.
- **The Heroic View:** The only good leaders are those who perform courageous, wise and compassionate features that the rest of us cannot. Think of the movie roles played by Gary Cooper, Jimmy Stewart and John Wayne. The perception is that such leaders are those who get the rest of us out of trouble.
- **The Top-Only View:** Leadership only happens at or close to the top of an organization. Everyone else “just follows orders.” If you are not the boss, you are nothing. If you are the boss, then you are everything anyone could wish. Being “the boss” is the ultimate goal.
- **The Social Script View:** You will be required to become a leader, when your proper turn comes and when asked, you should accept and be grateful. After all, not everyone is “asked”. This approach is common in professional associations and civic or community organizations.
- **The Position View:** If you are in the job and have the title, you are a leader. This idea is traditional in bureaucracies and highly-structured organizations and carries some validity even in the most effective systems. If your title is phrased “director of...” or “head of...”, your leadership virtues are assumed.
- **The Calling View:** Although not necessarily a religious experience, a “call” to lead can be quite compelling. This concept suggests that leaders have a sense of mission or purpose.

According to Bolden and Gosling (2006), leadership is a set of traits, qualities and behaviours possessed by the leader that encourage the participation, development, and commitment of others within the organization. In addition to interpersonal skills, it is the expectation of leaders to display excellent information processing, project management,

customer service and delivery skills, along with proven business and political acumen. They build partnerships, ‘walk the talk’, show incredible drive and enthusiasm, and get things done.

“Leadership is a process of giving purpose (meaningful direction) to collective effort, and causing willing effort to be expended to achieve purpose.” (Jacobs & Jaques, 1990, pp.281).

“Leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation.” (Hersey & Blanchard, 1988, pp. 86).

“Leadership is an attempt at influencing the activities of followers through the communication process and toward the attainment of some goal or goals.” (Donnelly, 1985, pp.362).

“Leadership is defined as the process of influencing the activities of an organized group toward goal achievement.” (Rauch & Behling, 1984, pp. 46).

“Leadership is interpersonal influence, exercised in a situation, and directed, through the communication process, toward the attainment of a specified goal or goals.” (Tannenbaum et al, 1961, pp. 24).

“Leadership is a function of knowing yourself, having a vision that is well communicated, building trust among colleagues, and taking effective action to realize your own leadership potential.” (Bennis, 1994).

“Leadership is about articulating visions, embodying values, and creating the environment within which things can be accomplished.” (Richards & Engle, Richards & Engle, 1986, pp.206).

“Leadership is the creation of a vision about a desired future state which seeks to enmesh all members of an organization in its net.” (Bryman, 1986: 6).

“It is a complex moral relationship between people, based on trust, obligation, commitment, emotion, and a shared vision of the good.” (Ciulla, 1998, pp. xv).

2.9 Leadership versus Management

Leadership remains a hotly debated and contested concept. It is a word that is used in many different ways and senses - at times a noun, referring to the leader or leadership team, and at times a verb, referring to the process of leading (Ciulla, 2005). In a similar way as Watson (2002) indicates that the use of the term management is interchangeably referring to a function (management), activity (managing) or a person (manager), the same happens with the term ‘leadership’.

As regards its differentiation from management, leadership as seen from the “new” perspective (Bryman, 1992) is purpose-driven, resulting in change based on values, ideals, vision, symbols, and emotional exchanges. Management is objectives-driven, resulting in stability based on rationality, bureaucratic means, and the fulfilment of contractual obligations. Although some view leaders and managers as different sorts of individuals (Zaleznik, 1989), others argue that successful leadership requires successful management, that leadership and management are complementary, that leadership goes beyond management, and that leadership is necessary for outcomes that exceed expectations (Bass, 1985; 1998).

Perhaps a clue to this confusion can be found if the etymology of the term is briefly considered. The roots of the word ‘leadership’ can be traced back to the word ‘lead’, first introduced into the English language around 800 AD from the old Anglo-Saxon word for “to travel”, and subsequently adapted, around 400 years later, to mean “to guide” (Grace, 2003). The term ‘leader’ originated circa 1300 AD in recognition of the role played by politicians and statesmen, but was not applied in organizations until the early 19th century, around the same time that the term ‘leadership’ began to be used to describe the activity carried out by ‘leaders’ (ibid). Thus, it seems that historically leadership has been the preoccupation of people of Anglo-Saxon descent (Bass, 1990), and is largely “a 20th Century concept [...] that is related to the democratization of Western Civilization” (Rost, 1991, p.43, cited in Grace, 2003, p.4). This use is more recently to “help Americans find significance in their search for the meaning of life” (Rost, 1991:7, cited in Grace, 2003, p.2). Goffman (1961) proposed that every kind of social interaction is like a game in which people take roles. People can become more or less strongly engaged in a certain role. Fulfilment is more likely to occur when people are fully engaged in a role.

Leadership is centrally concerned with people. Of course, leadership involves decisions and actions relating to all sorts of other things, but leadership is special compared to any other role because of its unique responsibility for people. Many capabilities in life are a matter of acquiring skills and knowledge and then applying them in a reliable way. Leadership is quite different. Good leadership demands emotional strengths and behavioural characteristics, which can draw deeply on a leader's mental and spiritual reserves. The leadership role is an inevitable reflection of people's needs and challenges in modern life. Leadership is therefore a profound concept, with increasingly complex implications, driven by an increasingly complex and fast-changing world.

According to Kotter (1990), managers must know how to lead as well as manage. Although there is still a lot of misconception between the uses of the two terms,

management is the term used to represent planning, organizing, staffing, directing and controlling the organizational operation to realize certain goals. However, leadership is a process of influence, which means the ability to affect the perception, attitudes or behaviour of others. The main idea of differentiating between leadership and management is to show that followers willingly comply with what their leaders require without using any type of formal or informal authority. In contrast, managers depend on formal authority to get their staff to carry out their objectives. See Figure 2.4.

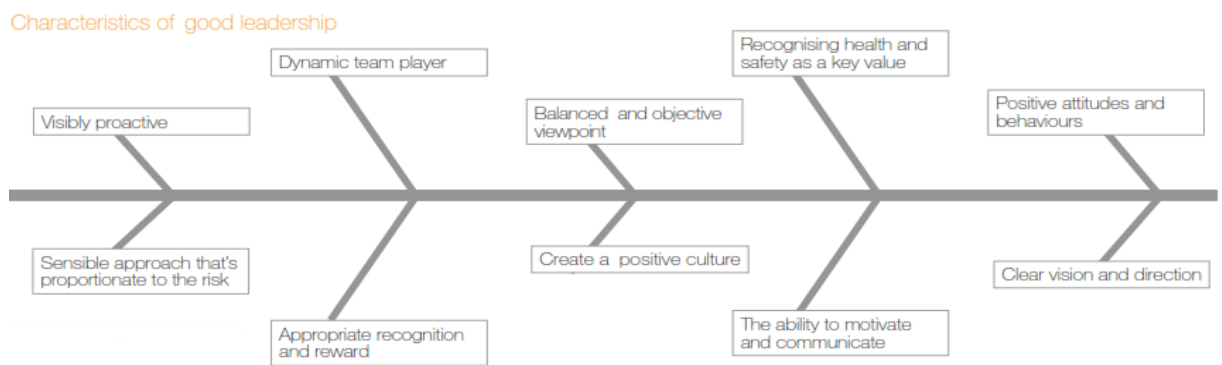


Figure 2.4: Characteristics of good leadership

Source: CIC (2012)

2.10 Effectiveness of Leadership in Developing Leaders with Character and Skill

In the 30 years that Wilson Learning has studied leadership, and has helped its clients develop their approaches to leadership effectiveness; supposedly, it is how leaders view their purpose which will set the course for their organization's success. For Wilson Learning, the purpose of a leader is to engage others in committing their full energy to the creation of value and success.

Wilson Learning's approach to assessing and developing leaders begins with leadership character – those elements of leadership that are enduring and core to how people view the purpose of leadership. While leadership character is the foundation of effective leadership, alone it is not sufficient. In order to produce tangible results, effective leaders need the skills and knowledge required to execute those values and principles.

Based on both in-depth research and practical experience, the skills required to execute effective leadership are four core roles that each leader must fulfill, defined as: the visionary, the tactician, the facilitator, and the contributor (Wilson Learning, 2006).

All leaders, regardless of level, need to fulfill all four roles. Nevertheless, they do not need to emphasize all four roles at the same depth and to the same extent. The prominence of each role will vary, depending on the leader's level. Wilson Learning identified three main levels: performance leader, growth leader, and strategic leader. According to Lamb and

McKee (2004), there are 75 key components of employee satisfaction. However, the two most important keys to effective leadership according to a study by the Hay Group, a global management consultancy, were trust and confidence in top leadership, which are the most reliable predictors of employee satisfaction in an organization. Moreover, effective communication by leadership in three critical areas was the key to winning organizational trust and confidence:

- Helping employees understand the company's overall business strategy.
- Helping employees understand how they contribute to achieving key business objectives.
- Sharing information with employees both on how the company is doing and how an employee's own division is doing relative to strategic business objectives.

2.11 Leadership Competencies

Typical leadership competencies include (Wellington & Foster, 2009);

(i) Basic attributes – essential criteria

- minimum of one year's experience
- one or more good degrees, superior intelligence
- evidence of high performance against the organization's leadership competencies and at least one excellent appraisal with their current employer
- highly motivated
- good spoken and written language
- mobile worldwide – requires mobility between countries as business needs arise

(ii) Basic attributes – desirable criteria

- ideally fluency in one or more languages
- some international experience (work/study/travel)
- worked in any function – experience of more than one is an advantage.

(iii) Leadership competence – displays the following

Strategic vision

- takes an interest in the business's strategy and the wider industry context

-
- thinks beyond daily tasks, interested in emerging technology and consumer trends

Values communication

- sets a good example
- understands how the values apply to daily work
- if they have direct reports, seen as a credible team leader
- good listening skills

Commercial drive

- high energy
- committed to achieving results
- reasonably knowledgeable about specific business sector

Building organizational capability

- may have had some involvement in recruitment
- organizes work team effectively
- uses formal processes and informal networks and gets things done

Customer commitment

- ‘front-line’ focused
- knowledgeable about customers (internal and external)
- works hard to satisfy both internal and external customers

International team leadership

- some understanding of the international dimension of the business
- will probably have worked, studied or travelled in different countries
- empathetic to other cultures
- aptitude for working well with others

2.12 Enablers of Leadership

Not all learners are effective leaders – but all leaders are passionate learners (Brooks & Johnson, 2010). Leaders learn, practise, reflect and improve as a repeating cycle throughout their careers, with intentional self-consciousness. At the same time, leaders are characterized by their ability to lead the learning of others. Jack Welch famously said that he spent about 40% of his time developing the next generation of leaders (Collins, 2005, pp 136-146). However, it is a key characteristic of leaders that they consider how to ‘scale what they do’, how to create organizational capacity and therefore, how can they lead the learning of others. This is the coaching element of

leadership. Great communication is also valued as an essential leadership skill. A leader needs to be in command, visionary and proactively foresighted. This makes a true leader. To be able to translate vision to goals and to communicate effectively to people marks a trait of a successful leader.

The essential behaviours of leadership credibility – *being authentic, being trustworthy, and being compelling* – stand on the shoulders of the character traits that support each of them: *courage, integrity, and commitment*, respectively (Hamm, 2011). See Figure 2.5.

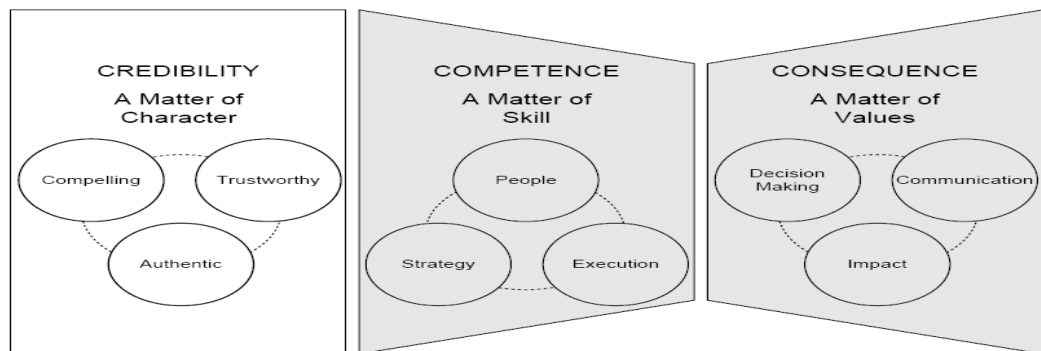


Figure 2.5: A Matter of Character

(Source: Hamm, 2011)

Another upcoming and trending enabler seen in leaders today is emotional intelligence. “IQ and technical skills are important; but emotional intelligence is the sine qua non of leadership” (Goleman, 1998). See Figure 2.6.

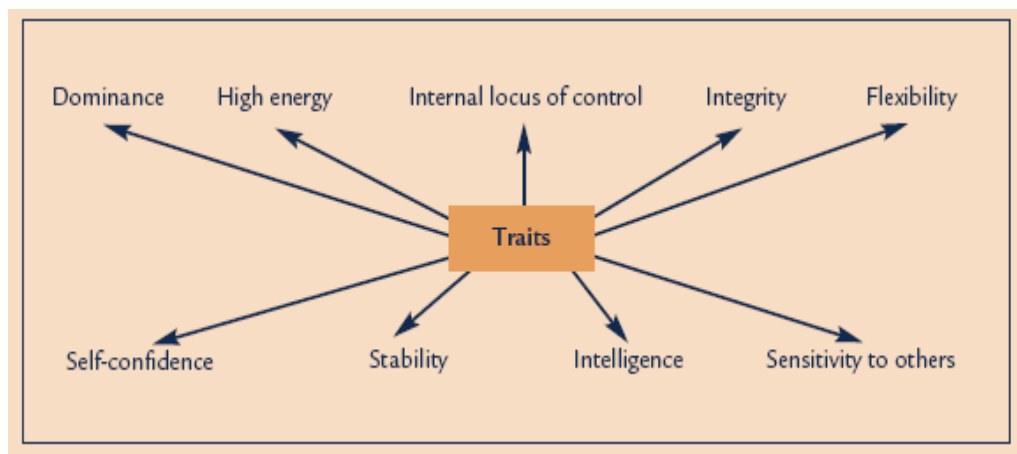


Figure 2.6 Traits of Effective Leaders

(Source: Lussier & Achua, 2010)

2.13 Group Decision-making

Group decision-making is defined as the decision situation in which there is more than one individual involved. These group members have their own attitudes and motivations, recognize the existence of a common problem, and attempt to reach a collective decision. It is a kind of participatory process in which opinions or decisions are collectively made. Group decision-making techniques help businesses turn ideas into action plans (Kaner, 2007).

Many literature reviews have been carried out on group decision-making. For instance, the works of Herrera, Viedma and Verdegay (1995; 1996a; b; 1997; 1998) are devoted to the development of selection processes with group decision-making. In their model, preferences of the individuals are modelled with linguistic labels. Later, Ben-Arieh and Chen (2006) propose the use of fuzzy linguistic labels to ascertain experts' judgments. There are numerous useful criteria proposed in the literature to judge group decision-making. Nonetheless, how effective they are is often sought. Rubin and Swap (1984) proposed six quality indicators for group decision-making that address both achievement and maintenance goals (Brightman, 1980; 1988): *efficiency, careful development and analysis of alternatives, fairness, member satisfaction and morale, leadership effectiveness, and growth over time.*

In an organizational perspective, placing employees into decision-making groups is great for tackling an issue or problem in the workplace. The more minds working on a single problem, the more potential solutions are created. This can be centred as creativity.

2.13.1 Advantages of Group Decision-making

- Group decision-making ideally takes advantage of the varied strengths and proficiency of its members, providing a varied number of alternative guides to a great solution. Similarly, a broad representation in the group increases the potential to create creative solutions.
- Group decision-making may also lead to a greater co-operative perspective of the eventual course of action chosen.
- The evaluation of options becomes competitive and analysis is prudent, down to the best options available.
- There is usually coordination seen among the members.
- The level of acceptance of the result is usually high.

2.13.2 Disadvantages of Group Decision-making

- Groups are generally slower to arrive at decisions than individuals are, so sometimes it is difficult to utilize them in situations where a decision must be made very quickly. Thus, the process is time-consuming.
- Group polarization is another potential disadvantage of group decision-making. It is a tendency of the group to converge on more extreme solutions to a problem, causing possible indecisiveness.
- It can also seem that sometime there is a domination of a certain member; this can lead to not exploring the possibilities further and to compromise on decisions.
- Another phenomenon is the shift to groupthink, which leads to looking at all alternatives and possibilities and to ignore facts and opinions that do not agree with the preferred plan of action.
- Sometimes members become too judgmental with each other, so that little or no attempt is made to obtain expert advice or guidance as egos clash.
- Failure to look into contingency plan in case something goes wrong.

2.14 Group Leadership

Group leadership is the progression of providing attention and direction to a definite cluster of people. Leadership of this type often involves enabling and guiding the actions of group participants, as well as accepting responsibility for the outcome of the group's efforts. There are a number of different approaches to group leadership, with varying styles used in different settings like autocratic, democratic, laissez-faire, etc. It is essential for any group leader to be aware of the choices made and to remember that all choices concerning the group's structure and her leadership will have consequences (Pollack & Slan, 1995).

It is mostly group leadership which is seen in today's organizations. Some of the characteristics of group leadership are:

- **Constancy:** This helps to maintain clear and consistent decision-making. This also places emphasis on the way the leader depicts himself, like behaviour, professional outlook, responses, etc.
- **Active listening:** To be able to perceive and to understand both verbal and non-verbal cues. Attention to detail and excellent listening skills are key traits in group leadership.

-
- **Firm identity:** Group work can be extremely powerful emotionally, and leaders should be able to control and yet be able to recognize and understand the reaction of the group. The leader should be aware of the boundary between personal and group issues (Pollack & Slan, 1995).
 - **Confidence:** When there is self-knowledge and a sense of clarity, the leaders are usually able to respond attentively to the groups' experience. There is also a structure of progress of self-learning involved throughout.
 - **Spontaneity:** Good leaders are imaginative and malleable.
 - **Integrity:** Having ethics can help the leader maintain ethical parameters in all decisions that they make. This includes the leader being very well aware of the policies and processes of the organization.
 - **Trust:** Trust is a vital factor in group leadership. This helps restores the team's faith in the leader.

2.14.1 Advantages of Group Leadership

Some advantages of group decision-making include the following: greater sum total of knowledge, greater number of approaches to the problem, greater number of alternatives, increased acceptance of a decision, and better comprehension of a problem and decision (Gunnarsson, 2010; Proctor, 2011).

- **Better Output** - Having many people involved in a group means that each comes with different knowledge, experience, values and points of view, creating a variety of ideas for solving a problem.
- **Cross-fertilization** - Exchange of ideas can inspire members of the group to explore ideas they would not otherwise consider.
- **Reduced Bias** - Shared responsibilities in decision-making can encourage members of the group to take risks, explore idealistic ideas, challenge accepted ways of doing things, and be more realistic in assessing risks with a particular course of action. Group pressure can also allow group members to accept change.
- **Greater Commitment** – contribution to an idea or decision gives a sense of purpose to the group, and creates a feel of commitment to implementing it successfully.
- **Effective Communication** – Involvement in finding solutions to a relevant problem creates acceptance, since they will know how and why that particular

solution was chosen. Additionally, people with knowledge relevant to the problem can communicate that knowledge directly if they participate in solving the problem.

- **Effective Solutions** – Diverse ideas and a wide range of knowledge and skills creates effective and better quality solutions.

2.14.2 Disadvantages of Group Leadership

Disadvantages to group decision-making include: social pressure toward conformity, individual domination, conflicting secondary goals, undesirable compromises, ambiguous responsibility, and time (Gunnarsson, 2010; Schoenfeld, 2011).

- **Competition** – Group members unconsciously perceive some situations as competitive, which generates destructive behaviour, which can drain the creative energy of the group. Eager to express our own ideas, we may totally ignore what others are suggesting. Power-seekers may use ploys such as highlighting flaws in others' arguments, barbed questions and displays of expertise to show their supremacy. These types of behaviour create an atmosphere which is incompatible with effective problem-solving.
- **Conformity** – There is a strong tendency for individuals in a group to want to conform to the consensus for a variety of reasons, including the need to feel liked, valued or respected, and this tends to make people censor their ideas accordingly.
- **Lack of objective direction** – The absence of an effective leader to give direction to discussions can cause group meetings to become diverted and ineffective. Even when there is strong leadership, the group leader often uses unnecessary pressure on the direction and content of the discussion. In addition, many ideas aired during a meeting are usually forgotten and cannot act as a constant stimulus to the discussion.
- **Time constraints** – Groups are generally slower to arrive at decisions than an individual, so sometimes it is difficult to utilize them in situations where decisions must be made very quickly.

2.15 The Joint Leadership Model

In most situations, one person will lead. However, there are situations, and these are becoming common practice, where two or more people will lead.

Either one person (focused or vertical) or several individuals can administer leadership. The latter approach is known as ‘shared’ or ‘distributed’ leadership (Carson et al., 2007) or self-management (Barry, 1991). While vertical leadership is top-down, shared leadership evolves within a team (Ensley et al., 2006). Shared leadership is related to but distinct from a simple co-operation between individuals (Carson et al., 2007). Knowledge from anyone in the leadership team is allowed to thrive in a distributed scenario.

Individuals in shared leadership teams complement each other in terms of strengths, contributions and roles (Miles & Watkins, 2007). The concept can also be implemented such that leadership can shift to different members over time (Carson et al., 2007). It is ideal for individual skills or strengths to show forth as needs arise or demands are placed on shared leadership teams. Thus distributed leadership or self-management teams can evolve more organically (Barry, 1991).

The two elements of shared leadership are: the leadership is provided by members of a team collectively; and members rely on each other (Carson et al., 2007). However, the right roles or skills need to be present at the right time (Barry, 1991) and synchronization amongst members is crucial (Zaccaro et al., 2001). The balance in their dynamics can be disrupted detrimentally when people move up or out of a team leadership (Miles & Watkins, 2007).

Distributed leadership can be used in sub-groups within an organization and in projects as well (Barry, 1991). Also, in situations of distributed leadership, one individual is often needed to be the visible representation of the group (Barry, 1991). “Today, complementary-leadership structures are common and, in some cases, even institutionalized” (Miles & Watkins, 2007), however, empirical studies of these are rather more recent (Carson et al., 2007). This paper concerns an empirical study of shared leadership in UAE construction.

2.16 Influence of Arab Culture on Leadership

Arab culture places a great emphasis on the style of leadership portrayed during the beginning stages of the origin of the country. From tribal leadership to the developed country’s leaders, the Middle East has seen a lot of leadership styles. One such dominant

leadership style witnessed was that of the late Sheikh Zayed, who was an extraordinary leader, besides which his dream of building a country was a transition of a long-held dream, since he was a ruler in 1946. His leadership was exceptional by all standards. His life was full of achievements in all areas of life. He was a leader whose heart was filled with mercy for his people; a truly charismatic leader.

House et al. (2004) issued a book about culture, leadership, and organizations after the GLOBE project study, which was in the area of culture and leadership of 62 societies. Aside from the recent GLOBE project, no further empirical studies have been reported that directly compare the behaviour of leaders or managers across Arab nations, and only a few have provided relevant data from within a single Arab nation. Robertson, Al-Khatib, Al-Habib and Lanoue (2001) surveyed the work values of managers in Saudi Arabia, Kuwait and Oman. Abdalla and Al-Homoud (2001) discussed that previous research suggested that Arab leaders are paternalistic, centralized, and have a strong tendency to base their decisions on intuition/hunch, and to subordinate efficiency to human/personal relations. The findings of previous research are consistent with the local social values and organizational practices, however; the desirable profiles reported by this research are not. However, it is worth noting that the desirable leadership profiles are consistent in many ways with the Islamic leader profile, in terms of its emphasis on integrity, team, future and performance orientations.

2.17 Leadership in Construction Projects

Successful completion of any project requires a good directive and leadership. In construction, the project managers play a great role in the overall management of the projects. According to Sunindijo (2007, p.167), there are thirteen leadership behaviours necessary to influence people, which have been identified from extensive literature reviews:

Visioning: The leader communicates the vision and helps the team to clarify its goals (Boehnke, DiStefano, DiStefano & Bontis, 1999; Katzenbach & Smith, 2003).

Inspiring: This behaviour is usually displayed by the communication of high expectations, using symbols to focus efforts, and expressing important purposes in simple ways (Boehnke et al., 1999; Humphreys, 2002).

Stimulating: The leader helps subordinates to look at old problems from new and different perspectives. Intelligence and rationality are used in problem-solving (Boehnke et al., 1999; Humphreys, 2002).

Coaching: The leader pays close attention to individual differences among subordinates; and he/she teaches and advises employees with individual, personal attention (Humphreys, 2002).

Rewarding: The leader provides rewards and positive feedback to employees who meet agreed goals (Boehnke et al., 1999; Humphreys, 2002).

Punishing: This style is characterized by giving punishment and negative feedback to employees who show undesirable and below-par performance (Daft, 2003).

Delegating: The basic concept of delegation is to transfer authority and responsibility to lower positions in the organizational hierarchy (Daft, 2003) and to provide challenging and difficult tasks to subordinates to enhance their development (Boehnke et al., 1999).

Leading by example: The leader does the same real work and contributes in the same way as subordinates (Zimmerer & Yasin, 1998; Littrell, 2002; Katzenbach & Smith, 2003).

Sharing and open communication: The leader shares all types of information throughout the organization, across functional and hierarchical levels (Daft, 2003).

Listening: The leader grasps both facts and feelings to interpret a message's true meaning, and shifts thoughts to empathizing with others (Cacioppe, 1997; Daft, 2003).

Directing: The leader tells subordinates exactly what they are supposed to do. The leader sets the goals, standards, rules, and regulations (Littrell, 2002; Daft, 2003).

Participating: The leader consults with subordinates before making decisions. Opinions, suggestions, and participation are encouraged in the decision-making process (Littrell, 2002; Katzenbach & Smith, 2003; Daft, 2003).

Proactive: The leader actively seeks information from others and identifies problems at an early stage (Daft, 2003).

2.17.1 The Roles of Project and Construction Managers

In the 1980s, research into project success factors intensified. Some authors identified functionality (performance), project management (schedule, on budget), commercial success, termination efficiency, and client satisfaction as success factors (Baker, Murphy & Fisher, 1988; Morris, 1988; Pinto & Slevin, 1988). Lee-Kelley and Leong Loong (2003) suggested that there is a significant relationship between the project manager's perception of project success and his or her own personality. Inner confidence and self-belief are likely to play a significant part in the project manager's ability to deliver a project successfully.

Jugdev and Müller (2005) reviewed the literature on project success and concluded that four conditions are necessary, but not sufficient, for success:

- Success criteria should be agreed with stakeholders before and during the project.
- A collaborative working relationship should be maintained between project owner/sponsor and manager.
- A project manager should be empowered to deal flexibly with unforeseen circumstances.
- The project owner/sponsors should take an interest in the performance of the project.

The term project success is considered different from project management success. Project success is measured against the overall objectives of the project whereas project management success is measured against the traditional gauges of performance such as completing project within time, cost, and meeting scope and quality (Cooke-Davies, 2002). However, when the term success is referred to in this study, it encompasses both the above definitions and is in line with Jugdev and Müller's (2005) notation of project success. Kerzner (2006) observed that projects fail to meet time and cost targets due to poor morale, lack of motivation, poor human relations, poor productivity, and lack of commitment from employees. It is evident from Kerzner's observation that people-

related issues play a crucial role in project performance, underlining the importance of a project manager's management and leadership roles.

2.17.2 Suitable Leadership Styles for Construction

In a literature review on leadership from the early 20th century to the present, Higgs (2003) identified six major schools: trait, behaviour, contingency, visionary, emotional intelligence, and competency schools. Rees et al. (1996) identified six traits of effective project managers, and asserted that effective managers are usually of above-average intelligence and have good problem-solving ability. Such traits are similar to intellectual competencies (IQ) that Dulewicz and Higgs (2005) referred to as part of leadership competencies. Other traits identified by Rees et al. are behavioural or motivational, such as energy, and skills-based traits, for example, communication. However, they do not provide evidence that these traits contribute directly to increased project success.

Among leadership styles, situational leaders focus on various tasks and relationship behaviours (Hersey & Blanchard, 1996), and transformational leaders may inspire followers, meet their developmental needs, and encourage new approaches and more effort toward problem-solving (Selzer & Bass, 1990). One may argue that the transactional leadership style, which is based on an exchange of reward and work, is more suited to organizational processes, whereas transformational leadership is useful when one is concerned with relations.

2.18 Summary of Chapter 2

Discussed in this chapter are various aspects of leadership. First the meaning of leadership was clarified. In order to understand the historic evolution, a careful study of the stages of the evolution of leadership was cited. Subsequently, the different types of leadership styles were presented, to explain the applicability and situational adaptability. Then a definition of the various leadership theories was discussed, including the difference between leadership and management. Finally, the chapter looked at a literature review of the characteristics of leaders and leadership traits.

In the second part of this chapter was an in-depth look at Arab culture and the leadership styles which have evolved over the years. The Arab world has grown progressively over the past few decades, and strong leadership is evident by the present image of the Arab

World. Arab leaders have marked their presence with a strong base of beliefs and culture which have merged to dominate the present era. This chapter will show the evolution of Arab culture during the past decade to the present.

An introduction to the construction field, investigating and discussing the influence of Arab culture on construction, with an emphasis on leadership traits, was portrayed. Also mentioned were outstanding issues and problems faced by leaders in the construction field. Group decision-making and group leadership were discussed, and this chapter showed that due to the various decision-making processes involved in engineering with different groups of people during various phases of the construction and project management field, group leadership is found to be most effective. The chapter also looked into the advantages and the disadvantages of group decision-making, and the importance of understanding the context of effective decision-making. Chapter 3 introduces culture and construction projects in UAE.

CHAPTER THREE

Culture and Construction Projects in the UAE

3.1 Introduction

This chapter covers a brief introduction to the field of construction and its impact on the world. Other than providing the necessary infrastructure and physical structures to any country/region, it also affects the economy and is the driving factor of GDP growth. With an opportunity for numerous job openings, this industry has helped trend the social and economic issues of the world.

This chapter looks into the phases of construction projects and the types and stages of the construction cycle. Furthermore, it discusses construction in the Arab world and the impacts of BIM and culture on it. The generic concept of culture is introduced leading to the discussion of Arab culture. The impacts of this Arab culture on the leadership style and approaches of project managers at various stages of construction are discussed, as well as its contribution to problems and underlying issues in the construction industry.

3.2 Introduction to Construction Projects

The ability to build and construct is one of the most ancient of human skills. In prehistoric times, building and construction was one of the talents that set *Homo sapiens* apart from the other species. Humans struggled to survive and sought shelter from the elements and the hostile environment that surrounded them by building protective structures. Using natural materials such as earth, stone, wood, and animal skins, humans were able to fabricate housing that provided both shelter and a degree of protection (Halpin & Senior, 2011).

As society became more organized, the ability to build things became a hallmark of the sophistication of ancient civilizations. The wonders of the ancient world reflect an astounding ability to build not only structures for shelter, but also monuments of gigantic scale. The pyramids and Greek temples such as the Parthenon (Halpin & Senior, 2011) are impressive testimony to the building skills of the civilizations of antiquity. Great structures punctuate the march of time, and many of the structures of ancient times are impressive even by modern standards. See Figure 3.1.

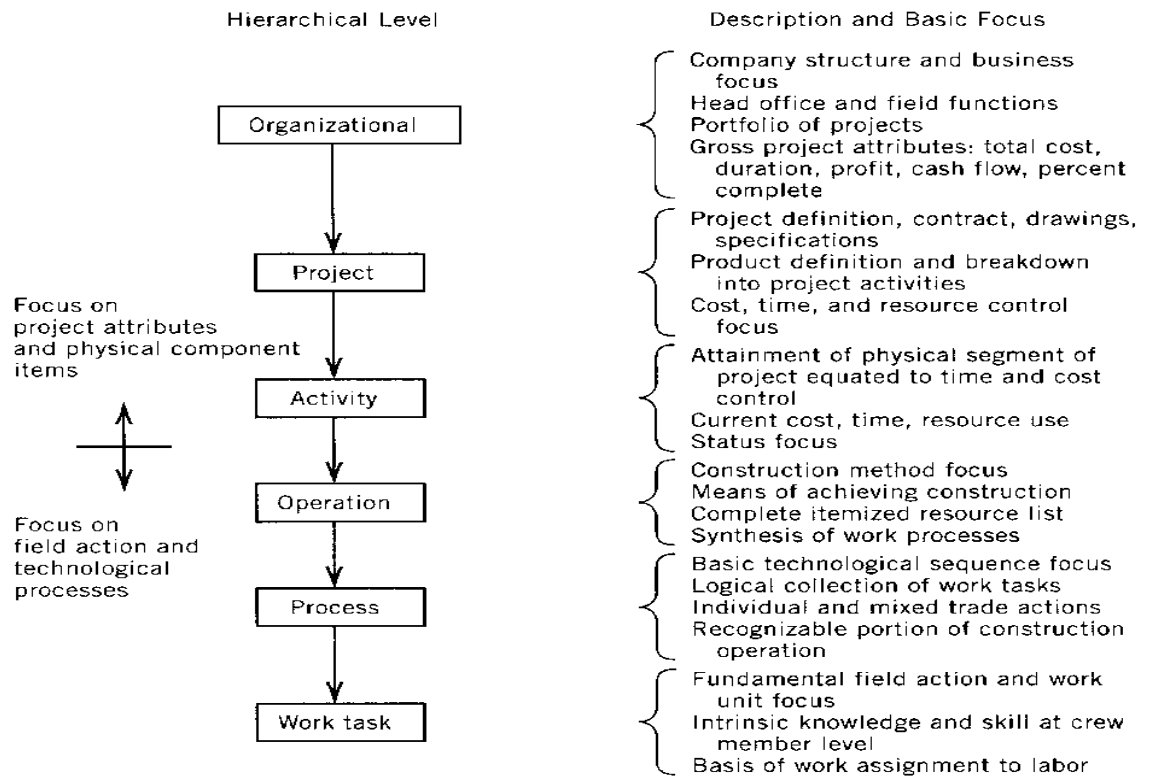


Figure 3.1: Management levels in construction

(Source: Halpin & Senior, 2011)

Bresnen, Bryman, Ford, Beardsworth and Keil (1986) concentrated on the leadership style of a wide selection of project managers and project leaders, i.e. design management, construction supervision and construction management. Bresnen's research was based on Fiedler's contingency model and employed the LPC (least preferred co-worker) scale to measure leadership style. A person's LPC score is said by Fiedler to be an invariant personal characteristic. The study involved 43 site managers for building and civil engineering sites based in England and Wales with a minimum contract value of two million pounds.

The findings of Bresnen's research can be summarized as follows:

1. Site managers generally exhibit a stronger task orientation than many other occupational groupings.
2. Site managers' leadership orientation was unassociated with a number of their background characteristics (age, education background, experience etc.).
3. There is a tendency for high LPC (more relationship-oriented) managers to perform better on larger-value contracts and contracts of longer duration.

The findings of Bresnen reinforced the important effect of situational variables on the effectiveness of leadership as suggested by the situational theorist.

The construction discipline is classified broadly into two themes; construction technology and construction management. Construction technology relates to the methods or techniques used to place the physical materials and elements of construction. The word technology can be broken into two sub words: technical from techno, and logic. Logic addresses the concept of sequence or procedure. Construction management, on the other hand, addresses how the resources available can best be applied to managers. According to Halpin and Senior (2011), the resources for construction are the four Ms (manpower, money, machines, materials) a term used in the construction industry to provide a simple but effective way of looking at any task that needs to be completed. Management involves the timely and efficient application of the four Ms to construct a project. Manpower implies the kind of people that are needed, what skillsets they should have, how many are needed and how they can work together. Money signifies budget, how the money can be raised, what contingency exists, purchase versus hire. Machines indicate trucks, cars, cement-mixers, PCs, server racks, telephones, and so on – what physical machines/tools are needed for the job, whether office space can be added, software, etc. Materials means concrete powder, sand, rebar, pencils, glue, USB drives, printing paper, diesel, electricity, stationery, etc. It is necessary to determine what is consumed to deliver the task, which should not be too sophisticated, to miss many aspects such as schedule, reporting, governance etc.

According to Sears, Sears and Clough (2008), the term ‘construction management’ is applied to the provision of professional management services to the owner of a construction project with the objective of achieving high quality at minimum cost. Such services may encompass only a defined portion of the construction programme, such as field construction, or they may include total project responsibility. The objective of this approach is to treat project planning, design, and construction as integrated tasks within a construction system. Where construction management is used, a non-adversarial team is created, consisting of the owner, construction manager, architect-engineer, and contractor. The project participants, by working together from project inception to project completion, attempt to serve the owner’s best interests in optimum fashion. By striking a balance between construction costs, project quality, and

completion schedule, the management team strives to produce for the owner a project of maximum value within the most economical period.

Construction management does not include design or construction services but involves management direction and control over defined design and construction activities. For a stipulated fee, design firms, contractors, and professional construction managers can perform it for the owner. Such services range from merely coordinating contractors during the construction phase to broad-scale responsibilities over project planning and design, project organization, design document review, construction scheduling, value engineering, field cost monitoring, and other management services. The selection of the construction manager by the owner is sometimes accomplished by competitive bidding using both fee and qualifications as bases for contract awards. However, the construction management arrangement is considered a professional service contract and can be negotiated.

Construction projects are intricate, time-consuming undertakings. The total development of a project normally consists of several phases requiring a diverse range of specialized services. In progressing from initial planning to project completion, the typical job passes through successive and distinct stages that demand input from such disparate areas as financial organizations, governmental agencies, engineers, architects, lawyers, insurance and surety companies, contractors, material manufacturers and suppliers, and building tradesmen (Sear et al., 2008).

According to Sears, Sears and Clough (2010), during the construction process itself, every structure even of modest proportions involves many skills and materials, and literally hundreds of different operations. The assembly process must follow a natural order of events that constitutes a complicated pattern of individual time requirements and restrictive sequential relationships among the structure's many segments. To some degree, each construction project is unique – no two jobs are exactly the same. By its own specific rules, each phase contributes in its aspects, to suit its environment, arranged to perform particular functions and designs that reflect personal tastes and preferences. Sear et al. cited that the vagaries of the construction site and the possibilities for creative and utilitarian variations of even the most standardized building product could be combined to make each construction project a new and different experience. The contractor sets up its 'factory' on the site and largely, to an extent, custom-builds each structure. The construction process is subject to the influence of highly variable and sometimes unpredictable factors. The construction team changes from one job to the next. All the complexities inherent in

different construction sites are an innate part of construction. Consequently, construction projects are typified by their complexity and diversity and by the non-standardized nature of their production. The use of factory-made modular units may reduce this individuality somewhat; in contrast, many manufacturing processes are moving toward ‘one-off’ production and adopting many of the project management tools originating in the construction industry (Sears et al., 2010).

3.2.1 Types of Construction

The construction sector is very diverse, and Halpin and Senior (2011) have classified the sector into four major types of projects to understand the structure of the industry. They classified the construction projects as (a) building construction, (b) heavy engineered construction, (c) industrial construction, and (d) residential construction, depending on whether they are associated with housing, public works, or manufacturing processes. The building construction category includes facilities commonly built for habitation, institutional, educational, light industrial (e.g., warehousing, etc.), and commercial, social, and recreational purposes. Architects or architect engineers usually design building construction projects. Engineered construction usually involves structures that are planned and designed primarily by trained professional engineers (in contrast to architects). Normally, engineered construction projects provide facilities that have a public function relating to the infrastructure and, therefore, public or semi-public (e.g., utilities) owners generate the requirements for such projects. This category of construction, which is commonly subdivided into two major subcategories – engineered construction, also referred to as (a) highway construction and (b) heavy construction. Industrial construction usually involves highly technical projects in manufacturing and processing of products. Private clients retain engineering firms to design such facilities. In some cases, speciality firms perform both design and construction under a single contract for the owner/client. See Figure 3.2.

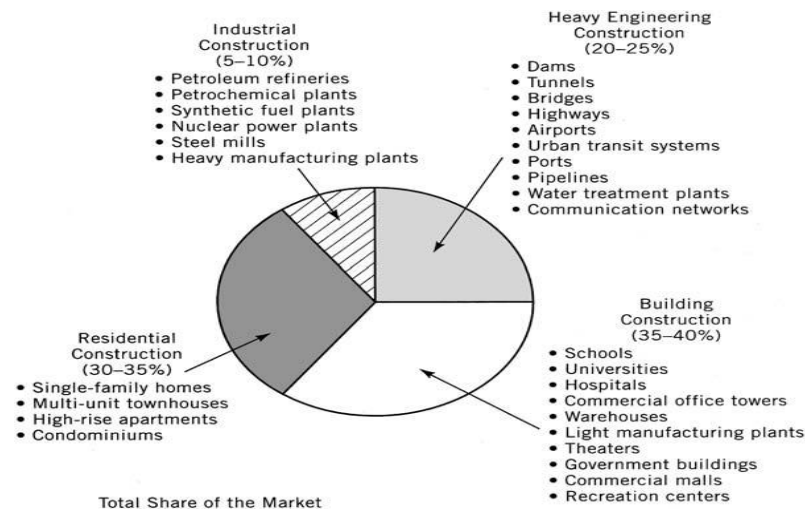


Figure 3.2: Breakdown of construction industry segments.

(Source: Halpin & Senior, 2011)

Value engineering (VE) was developed during World War II in the United States. In 1947, General Electric appointed an engineer Lawrence D. Miles, an engineer to produce a method that would both make changes in manufacturing techniques, or design, which led to substantial cost reduction. He developed a systematic approach called Value Analysis (VA), which aims to realise value for money by meeting the required function with minimising the whole life cost of a project and without detriment to quality and performance of the project (Dell'Isola 1997). It began as a search for alternative product components due to a shortage of critical items during the war. Value engineering is a proven management technique used to identify alternative approaches for satisfying the requirements of a project while lowering costs and ensuring technical competence in performance. Government agencies as clients encouraged contractors to adopt VE to generate cost savings over the life of projects. Contractors in return are interested in VE because it offers potential to earn higher profit margins while it enhances their reputation in the industry as low-cost providers of goods and services. Because of financial incentives, responsible contractors are constantly brainstorming improvements for task/project performance. The concept of VE requires the contractor to explore all value-added options within given constraints, such as specifications, budget and schedule, and analyzes the constraints without sacrificing the intent of the project. The significance of VE must be addressed at an early stage of the project: VE has the potential to the first step to success or disaster depending on how it is executed (Acharya, Pfrommer & Zirbel, 1995).

The concept of VE was introduced in the construction industry in the early 1960s through directives from the Navy and Army Corps of Engineers relating to facility procurement. Other major government agencies (e.g., Public Building Service) joined this movement by introducing incentive clauses in facility procurement (construction) contracts, which provided rewards to contractors for value proposals that led to reduced construction costs while maintaining the functionality of the completed facility. These clauses are generally structured as follows:

The contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECPs) voluntarily. The contractor shall share in any net acquisition savings realized from accepted VECPs, in accordance with the incentive sharing rates specified in the contract (Acharya et al., 1995).

Sears, Sears and Clough (2008) defined the stages of the development of construction projects as follows:

(a) Planning and definition: After the owner identifies the need for a new facility he needs to define the requirements and outlines the financial constraints. This stage involves establishing broad project characteristics, such as location, performance criteria, size, configuration, layout, equipment, services, and other owner requirements needed to establish the general aspects of the project. The owner is responsible for defining the work; a design professional can be called to provide technical assistance and advice.

(b) Design: This stage is the architectural and engineering design of the entire project. It concludes with the preparation of final working drawings and specifications for the overall construction programme. Design, procurement and construction often overlap, with procurement and construction beginning on certain segments as soon as the design is completed and drawings and specifications become available.

(c) Procurement and construction: Procurement is ordering, expediting, and delivering of key project equipment and materials. Construction is the process of erecting the project physically and putting the materials and equipment into place by providing the workforce, construction equipment, materials, supplies, supervision, and management necessary to accomplish the work. Both functions can coexist. See Figure 3.3.

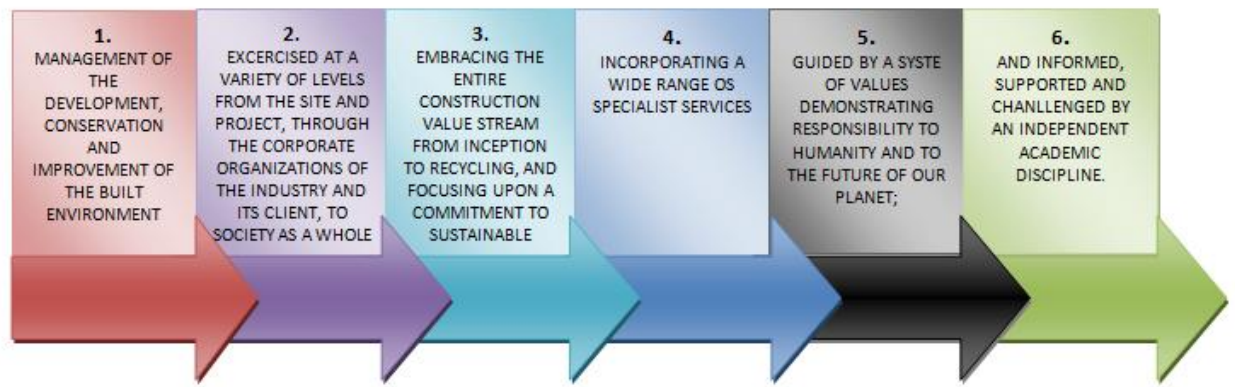


Figure 3.3: Definition of Construction Management

(Source: The Chartered Institute of Building, 2010)

It is during the initial design stages where estimates such as annual cost to the owner and total life-cycle costs of the facility are made; however, project cost and time control essentially begin during the design phase. To minimize the full cost of constructing, operating, and maintaining the new facilities over their useful life, technical job standards are weighed against cost, function, maintenance, and appearance with the objective. During the development of the design phase, construction methods and replacement of materials is subject to value analysis, which is a reasonable way of optimizing the entire construction process in terms of cost and time. Cost budgets are prepared as the design nears completion, an indication also of time control during the design stage, directed towards minimizing construction time and consistent with project quality and total cost. The delivery times of materials and project equipment are checked during the design stage. When there are long delivery periods involved, procurement is initiated as the design progresses appropriately to allow detailed purchasing specifications to be drawn up. Favourable construction methods are chosen, where cost characteristics are suitable such as labour and construction equipment. Owners have the option of using many different procedures to get their structures built. However, it is essential that one party assumes management responsibility for the field construction process. This party may be the owner, the architect-engineer, a construction manager, or a general contractor. Usually the management of field construction is done on an individual project basis, with a project manager responsible for all aspects of the construction. As for large projects, a field office is directly established on the job site for the project manager and his staff. A good working relationship with a variety of outside persons and organizations, such as architects, engineers, owners, subcontractors, material and equipment dealers, labour

unions, and regulatory agencies, is an important part of guiding a job through to its conclusion. Field project management is directed toward pulling together all the diverse elements necessary to complete the project satisfactorily (Sears et al., 2008).

3.3 Building Information Modelling

Building Information Modelling (BIM) is an intelligent model-based process that provides insight for creating and managing building and infrastructure projects faster, more economically, and with less environmental impact. It helps achieve business results by enabling more accurate, accessible, and actionable insight throughout project execution and life-cycle. BIM uses information to provide solutions for design, visualization, simulation, and collaboration that facilitate better decision-making and break down the barriers to better business. Whereas from a strategic level, BIM tenders the capability in addressing many of the industry's failings, including waste reduction, value creation and improved productivity spanning the whole concept-to-occupation time-span.

Earlier building design used two-dimensional drawings (plans, elevations, sections, etc). Building designs were communicated through dozens or even hundreds of separate, often inconsistent documents. However, CAD documents usually exclude the very information necessary for effective design evaluation and construction, such as bid and contract documents, bills of materials (BOMs), timelines, specifications, price lists, installation and maintenance guides, cable lists and labels. BIM extends this beyond 3-D, covering spatial relationships, light analysis, geographic information, and quantities and properties of building components.

BIM existed in 1970 (Eastman et al., 1974). The first time the term 'building information model' was presented in a paper by Van Nederveen et al. (1992) but this was not popularized until Autodesk released the white paper entitled "Building Information Modeling" in 2003.

BIM is described as:

"... a digital representation of physical and functional characteristics of a facility. As such it serves as a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle from inception onward." (United States National BIM Standard VI, 2008).

3.3.1 BIM in Construction Management

Project managers are usually challenged to deliver successful projects despite constrained budgets, limited workforce, tight schedules, and limited or conflicting information. In construction management, the disciplines such as architectural, structural and MEP need to be coordinated, and BIM aids in collision detection at the initial stage, identifying the exact location of discrepancies. A huge proportion of our scarce resources is consumed by infrastructures and building. Construction resource allocation and reduction are major drivers toward BIM implementation, whether it be using renewable or recycled materials, or reducing energy consumption. In 2004, the Construction Industry Institute estimated that 57% of money spent on construction is non-value-added, which is WASTE (Eastman et al., 2009).

BIM is more than drawings; it is a data repository for building design, construction and maintenance information combined in one convenient model to share with all the stakeholders.

3.3.2 Benefits of BIM

Based on the report on building information modelling by (Mehmet, 2011) here are some of the benefits of using BIM:

- **Modelling vs. 2D Drafting:** Building modelling improves over 2D drafting by allowing designers to envision the building and its contents from all angles, saving time by producing and controlling multiple designs simultaneously.
- **Change Management:** Parametric elements that are changed in one location change in all corresponding views and locations.
- **Leveraging Data:** BIM is a database that contains manufacturer information, pricing, physical information and electromechanical data for many of the devices in the building. Leveraging this data means that very accurate material schedules can be created from the parametric model elements and they will change automatically with visual components, which allows the projection of material usage before construction is complete and to create real usage reports for building management after construction.
- **Value-added Tasks:** The availability of building information that is inherent to the model aids in the generation of reports that may be provided to the client as value-added services.

-
- **Improved Coordination:** BIM allows all team members easy access to information, such as power consumption and weight, to verify that the building element in question will be attuned with the components of the building for which they are responsible.
 - **Improved Accuracy and Efficiency:** BIM helps reduce errors and omissions (E&O) which should in turn reduce E&O claims and professional liability.
 - **Delivery Process Efficiencies:** Electronic reviews of every portion of the building design including equipment schedules, room views, system designs, fabrication schedules, green building information, pricing and more are possible as BIM is the single repository for all of this information.
 - **Client Satisfaction:** The exchange of visual information mitigates the time needed for communicating complex ideas and allows more time to be creative for your clients.
 - **Ongoing Technology Management:** Technology professionals can use the information in a model to schedule routine maintenance and issue trouble reports to technology service personnel.
 - **Facility Management:** Facility managers can use BIM to gather usage data, prepare maintenance schedules using predictive data, manage daily operations and plan for future purchases and construction additions.

3.4 Abu Dhabi Issues

Abu Dhabi is the country's capital and the second-largest city. The metropolis serves as the financial, transportation, and communications centre of this major oil-producing area. The city is also a significant port and is home to a majority of the federal government ministries. The emirate of Abu Dhabi as a whole contains nearly 40 per cent of the UAE's total population. There is a commitment to preserving traditional arts and culture, which is evident at both the popular and governmental levels. The Abu Dhabi Cultural Foundation sponsors major events on artistic, social, and other themes featuring Arab and other cultural traditions throughout the year. The Foundation's Center for Documentation and Research is a national archive where scholars from around the world can research the history of the UAE back to the earliest times.

Abu Dhabi's economy showed that its GDP grew by around 4.8% in year 2014 to \$259bn (AED953bn), however, the biggest environmental problem in the UAE seems to be energy consumption, which is unsurprising given the number of gas-guzzling cars on the roads

and air conditioning systems. The government has introduced greening campaigns to try and reduce the negative environmental effects and lessen the region's 'footprint'. Measures such as installing hundreds of thousands of water meters to give more accurate readings, and reassessing the current electricity subsidies, are being looked at to try to encourage more responsible use by the population. Issues such as pollution are being tackled; plans to eliminate the use of so-called "high-sculpture diesel" commercial fuels in vehicles and industry are introduced using new 'green diesel'. Compressed natural gas (CNG) is considered as an alternative fuel for vehicles and the building of more CNG stations across the UAE.

3.4.1 UAE General View

The United Arab Emirates is a country situated in the south-east of the Arabian Peninsula in Western Asia on the Persian Gulf, bordering Oman to the east and Saudi Arabia to the south, as well as sharing sea borders with Qatar to the west and Iran to the north (Heard-Bey, 1982). It has some 750 kilometres of shoreline along the so-called Lower Gulf, constituting more than a third of the Arabian coast of the Gulf. This shore is reached from the Indian Ocean after navigating the length of the Gulf of Oman and rounding the tip of the long and narrow Musandam Peninsula through the 46-kilometre-wide entry to the Gulf, the Straits of Hormuz, and past the southern shore of the Iranian province of Baluchistan (Almezaini, 2012). Another geographical feature, which exerts an equally vital influence on day-to-day life in the UAE, is the desert. More than two-thirds of the territory of the seven states take up tracts of mostly sandy desert with varying amounts of sparse seasonal vegetation.

The word "emirate" is derived from the Arabic word "amir" meaning "prince" but also "chief", "leader" or "master." There are seven emirates because ultimately seven different rulers or ruling families were recognized after the withdrawal of the British from the Gulf in the late 1960s. Up until the 1850s, the coast of what is now the UAE, known as the "Pirate Coast" because of the prevalence of raids on shipping through the Gulf. After the local sheikhs signed a maritime truce with the United Kingdom it became known as the "Trucial States" until the withdrawal of the British and the federation of the sheikhdoms or emirates in 1971, which gave birth to the United Arab Emirates as a nation (Hansen, 2009). The UAE is a federation of seven emirates (i.e. states), each governed by a hereditary crown prince (sheikh), with one

national president of all Emirates. The constituent Emirates are Abu Dhabi, Ajman, Dubai, Fujairah, Ras Al-Khaimah, Sharjah, and Umm Al-Quwain. The base of the political system is its 1971 constitution, which is composed of several intricately connected governing bodies. As a federation of seven monarchies, whose rulers retain absolute power within each emirate, with a UAE president, it is neither a constitutional monarchy nor a republic. The Sheikhs choose one of their members to be the president of the federation, but this does not alter the monarchical character of the government of the individual emirates. The constitution is concerned solely with the relations between the emirates as members of the federation, and does not prescribe a constitutional system of government. The Emirate of Abu Dhabi is the capital and the largest of the seven member emirates of the United Arab Emirates, and is the centre of political, industrial and cultural activities (Emirates in the UAE, 2014). The traditional patriarchal style of leadership, combined with political loyalties structured around the country's various tribal elements, continues to be the UAE's political system. On the federal level, the Supreme Council, comprised of the rulers of each of the seven emirates, is the highest executive and legislative authority, "exercising supreme control upon the affairs of the Union in general" (Art. 49 of the UAE constitution). The country's president is the ruler of Abu Dhabi, which is the largest emirate in terms of size as well as wealth, and assumed a natural leadership role within the UAE (BTI, 2012).

The population of the UAE in 2011 was estimated at about 7.891 million (World Bank, 2011) of whom around 20% are Emiratis and 80% are expatriates. As can be seen on the chart below, more than 50% of the population is from the Asian continent and they represent the majority of the people working on the construction sites. See Figure 3.4.

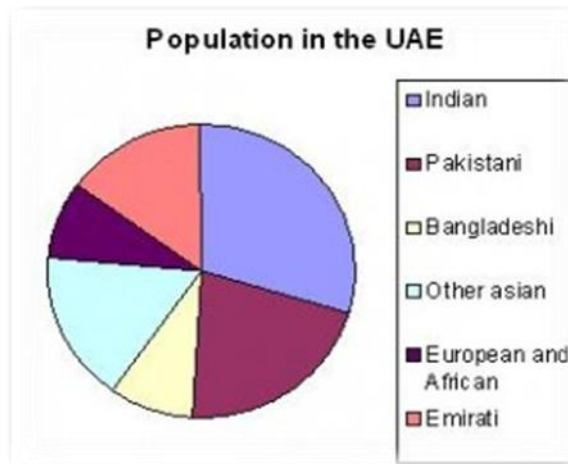


Figure 3.4: Population in the UAE

Source: (World Bank, 2011)

According to the Human Development Index (HDI) report, the United Arab Emirates' HDI value for 2011 is 0.846 in the very high human development category, positioning the country at 30 out of 187 countries and territories. Between 1980 and 2011, United Arab Emirates' HDI value increased from 0.629 to 0.846, an increase of 34.0 per cent, or an average annual increase of about 1.0 per cent (HDI Report, UNDP, 2011). See Table 3.2.

The United Arab Emirates' progress in each of the HDI indicators. Between 1980 and 2011, United Arab Emirates' life expectancy at birth increased by 8.4 years, mean years of schooling increased by 6.2 years, and expected years of schooling increased by 4.7 years. United Arab Emirates GNI per capita decreased by about 23.0 per cent between 1980 and 2011 (HDI Report, UNDP, 2011). See Table 3.1 and Figure 3.5.

Table 3.1: Key Indicators (1) Average annual growth rate. (2) Gender Inequality Index (GII). (3) Percentage of population living on less than \$2 a day.

(Source: The World Bank, World Development Indicators, 2011; UNDP, Human Development Report, 2011)

Population	mn.	7.5	HDI	0.846	GDP p.c.	\$	47215
Pop. growth ¹	% p.a.	7.9	HDI rank of 187	30	Gini Index		-
Life expectancy	years	76	UN Education Index	0.741	Poverty ³	%	-
Urban population	%	78.0	Gender inequality ²	0.234	Aid per capita	\$	-

Table 3.2: United Arab Emirates' HDI trends based on consistent time series data, new component indicators and new methodology.

(Source: UNDP, Human Development Report, 2011)

	Life expectancy at birth	Expected years of schooling	Means years of schooling	GNI per capita (2005 PPP\$)	HDI value
1980	68.2	8.6	3.1	77,805	0.629
1985	70.2	9.6	3.6	52,287	0.652
1990	71.8	11.1	4.3	43,734	0.690
1995	73.1	11.0	5.6	42,771	0.724
2000	74.4	10.7	6.9	43,052	0.753
2005	75.5	12.1	8.4	51,895	0.807
2010	76.4	13.3	9.3	59,819	0.845
2011	76.5	13.3	9.3	59,993	0.846

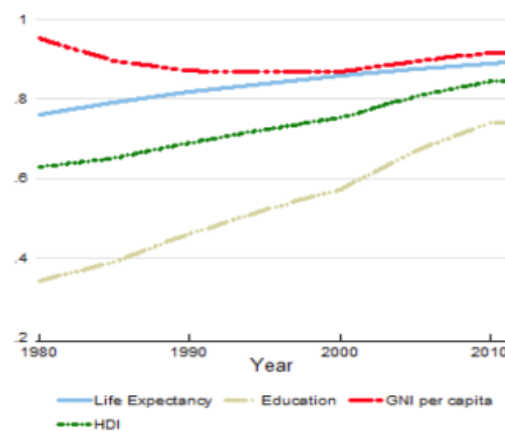


Figure 3.5: Trends in United Arab Emirates' HDI component indices 1980-2011

(Source: UNDP, Human Development Report, 2011)

The capital, Abu Dhabi, lies on a T-shaped island jutting into the Persian Gulf from the central western coast, with land surface measuring 67,340 km², which is equivalent to about 80% of the country's total area. Its coastline extends 700 km, with more than 200 islands strewn along the Emirate's territorial waters, including Das Island, 170 km north-west of Abu Dhabi city, Mabraz Island and Sir Bani Yas Island, 180 km west of the capital. Abu Dhabi is divided into three regions, Abu Dhabi Region (which includes Abu Dhabi city), Al Ain Region and the Western Region. The below Figure 3.6 shows satellite images from 1977 and 2003 highlighting the phenomenal rate of development and progress, and a dramatically altered perimeter. Where once a few simple buildings resided, today, stunning skyscrapers take their place. Manmade islands flourish; parks, gardens and fountains have replaced a barren terrain; and the construction boom continues at a furious rate.



Figure 3.6: Abu Dhabi - Then and Now.

(Source: Explorer, 2011/2012)

Abu Dhabi is the richest emirate and has progressed tremendously in the past four decades, from a population of 25,000 in 1960 to almost 2.9 million at the end of 2011, which is forecast to rise by about 5.4 per cent to nearly 3.1 million at the end of this year. The city has transformed itself from a barren desert to a wealthy, cosmopolitan capital, home to a number of important financial institutions, company headquarters and high-ranking business people and professionals (The National Bureau of Statistics, 2011). See Figure 3.7.

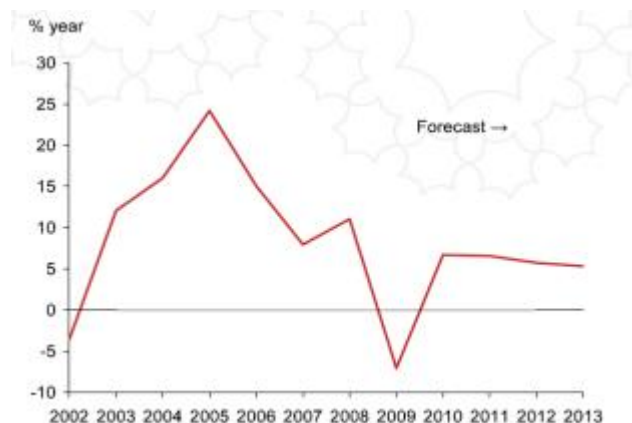


Figure 3.7: Real GDP Growth (2012-2013) Abu Dhabi

(Source: Macroeconomic & Demographic Model (based on nominal GDP historic data (2002-2008) from Ministry of Economy))

According to Abdelsalam and Gad (2009) the construction sector in the Arab Gulf Cooperation Council (GCC) countries has been witnessing a booming expansion, with more than \$800 billion of active projects in the Gulf, and this figure is growing by up to \$10 billion a week. Trends indicated this market to be worth over \$1 trillion in 2007. Dubai, the Gulf's regional centre, was expected by the Middle East Economic Digest (MEED) to be preparing to invest up to \$200 billion mainly in residential, tourism,

transport and utility projects by 2025 (Mansour, Gad and Hassaneen, 2009). A statistical report in 2009 stated that up to five million residential units are under construction in the GCC, including more than 1400 new high-profile developments collectively valued at over US\$ 0.66 trillion. In 2006, there were about 2100 projects either planned or underway in the Gulf region, of which the UAE and Saudi Arabia made up 29% and 20%, respectively (Mansour, Gad and Hassaneen, 2009).

The building and construction sector remains the third-largest sector of the economy after oil and trade in the UAE. The country has witnessed massive investments in the construction industry from both public and private enterprises during the past few years. The UAE accounted for around 20% of the total Arab construction industry in 2008. Despite the sluggish growth in 2009 amidst the global financial distress, the UAE construction industry managed to record strong growth during 2007-2009 and contributed approximately 8% to the country's GDP in 2009 (Alpen Capital, GCC Construction Industry, Residential and Commercial Building Construction, 2012).

According to a report by Oryx Middle East, the UAE construction industry was expected to grow at a CAGR of around 7% during 2010-2013. Rapid economic development is the major factor driving construction activities and infrastructure development in the UAE. The country has drawn investments from around the world. Most of the investments are mainly focused on the development of infrastructure for the hospitality, retail, real estate, and healthcare industries. Moreover, the government efforts to diversify its economy from oil-based to other industries will boost infrastructure investments in future (Oryx Middle East, UAE Construction Industry, 2013). See Table 3.3.

Table 3.3: Sectoral Contribution to GDP (%) 2005-2009

(Source: National Bureau of Statistics, Abu Dhabi, UAE)

Sector	2005	2006	2007	2008	2009
Agriculture, livestock and fishing	2.2	1.9	1.7	1.6	1.7
Mining and quarrying	32.4	32.6	33.2	33.8	29.2
Crude oil and natural gas	32.1	32.3	32.9	33.5	28.9
Quarrying	0.3	0.3	0.3	0.3	0.3
Manufacturing	14.5	15.9	15.4	15.1	16.2
Electricity, gas, and water	1.8	1.6	1.5	1.5	1.6
Construction	9	9.7	9.6	9.7	10.7
Wholesale and retail trade, and repairing services	9.2	8.8	8.8	8.6	9.0
Restaurants and hotels	1.8	1.7	1.7	1.6	1.8
Transport, storage, and communications	6.8	6.7	6.7	6.5	7.1
Real estate and business services	7.7	7.3	7.3	7.7	8.2
Social and personal services	1.8	1.7	1.7	1.7	1.9
Financial corporations	5.7	5.5	5.4	5.3	5.8
Government services	8	7.5	7.8	7.5	8.0
Domestic services of households	0.6	0.6	0.6	0.5	0.5
Less: Imputed bank services	1.5	1.4	1.3	1.3	1.4

The government of the United Arab Emirates is investing billions of dollars every year in new facilities to improve the infrastructure of the country. Modern cities have risen from the barren desert, connected by a vast network of first-class roads and linked to the outside world by modern airports and ports. Housing compounds, schools, hospitals, shopping malls, telecommunications, electricity and water, luxury hotels, and recreational facilities were all provided in a short space of time. The majority of these projects were constructed in Dubai and Abu Dhabi Emirates (Zaneldin, 2006). See Figure 3.8.

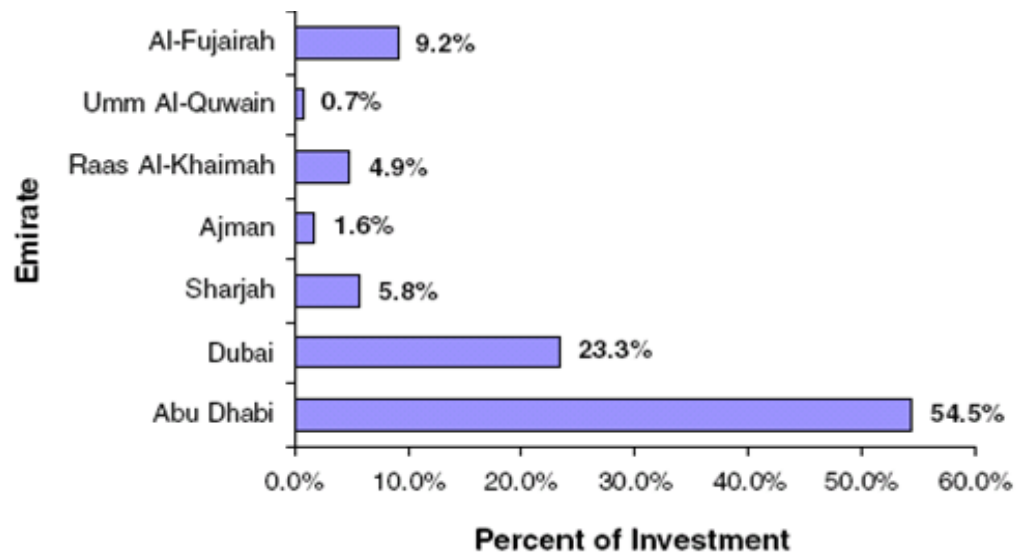


Figure 3.8: Percentage of investments in all emirates in UAE

Source: (Zaneldin, 2006)

The UAE government has taken a more active role in the development of environmentally-friendly energy technologies, coupled with appropriate efforts to formulate strategic rational use of energy policies to ensure buildings' sustainability and provide guidelines for future architecture (Doukas et al., 2006). On the ground, the UAE government started to invest in renewable energy technologies that will make this country less dependent on conventional energy and showed a significant effort regarding the development of such technologies, and especially solar energy, which could play a key role in bridging the gap between the supply of fossil fuels and the energy demand. Such investments have been seen in several projects concerned with the design, manufacture, supply, installation and commissioning of solar power systems and solar photovoltaic systems, such as the Masdar PV project to invest over \$2 billion in solar production (Hassan, 2010).

GDP represents one of the main sources of national income to the United Arab Emirates, contributing not less than 90% in gross national income of the state. During the period 1990-2009, the Emirate of Abu Dhabi contributed from 53%-62%, while the Emirate of Dubai contributed from 24%-35%, and the percentage contribution of the five other emirates combined (Sharjah, Ajman, Ras Al Khaimah, Fujairah, Umm Al Quwain) during the study period ranged from 3%-23%.

The UAE's economy developed remarkably during the period between 1990 and 2009, supported by growing oil revenues, the main result of the escalation of prices in the international market. Access to record levels, which is reflected in the high pace of economic activity due to the implementation of large-scale projects public and private, where GDP rose at current prices of 125.266 billion AED in 1980, 914.300 billion AED in 2009. All this led to an excessive growth rate of 63%, in other words, the GDP of the UAE has doubled more than six times during the period 1990-2009. Because of the analysis of econometric models, it shows that there is a strong impact by the public expenditure on GDP as an increase in public expenditure in the UAE. Millions of dirhams led to an increase in gross domestic product of 4.159 million dirhams, and that public spending contributes to 90% to explain and interpret the changes that will occur in the gross domestic product. (Mohamed Issam, 2011).

3.4.2 Abu Dhabi 2030

An Emiri decree (number 23) of 2007 created the Abu Dhabi Urban Planning Council, which is responsible for the urban development, and visionary plan of Abu Dhabi 2030 Urban Structure Framework Plan, published in September 2007 (Abu Dhabi UPC, 2010). The Emirate of Abu Dhabi in 2005 commenced an historic government restructuring programme with the aim of boosting efficiency and enhancing government productivity to ensure improvement in how the government serves the needs of its people and visitors. The purpose of the review was to make the government more responsive to the needs of a growing population, and better able to sustain and prolong economic growth. The desired outcome: a new structure based on the government as a regulator rather than an operator of services. The need for change has promulgated more than 110 laws and 75 decrees to facilitate the restructuring of its government. The rationale of these restructure reforms was not only to drive improved efficiency in the operation of government, but also to ensure the competitiveness of the economy of Abu Dhabi for now and in the years to come. With the restructure, the government intends to broaden the base of the economy and promote the role of the private sector as a provider of services for residents and visitors. The essence of the restructure is for government to become the regulator of services delivered to its people, and for the private sector to become the provider of those services.

According to the Abu Dhabi UPC (2010) Plan Abu Dhabi 2030, the UPC has five key roles to fulfil in support of the implementation of the Abu Dhabi Urban Planning Vision 2030:

- 1) To develop the comprehensive plans for blocks, neighbourhoods, districts and regions across Abu Dhabi Emirate;
- 2) To assist in the implementation of all plans created by guiding, monitoring and working with the implementation team and other government bodies;
- 3) To develop regulations, guidelines and policies that will help guide planning and development in the Emirate;
- 4) To review and assess major strategic developments to comply with the plans, policies, regulations and guidelines in line with Capital 2030, Al Ain 2030 and Al Gharbia 2030 and external government requirements; and
- 5) To incorporate and encourage Estidama principles of sustainability into the built environment through the Estidama Pearl Rating Systems. See Figure3.9.

2007 - Baseline

- 930,000 residents
- 1.8 million annual tourist visits
- ~180,000 residential units

	Office Space (million m ²)	Retail Space (million m ²)	Industry Space (million m ²)	Hotel rooms	Golf courses	Schools	Tertiary Institutions	Hospital beds
Baseline	1.4	0.86	4.0	10,000	3	236	13	2,800

2013 - Five Year Projection

- 1.3 million residents
- 3.3 million annual tourist visits
- 251,000 residential units

	Office Space (million m ²)	Retail Space (million m ²)	Industry Space (million m ²)	Hotel rooms	Golf courses	Schools	Tertiary Institutions	Hospital beds
Emerging	1.8	1.1	1.0	--	9	224	8	3,495
Growing	2.7	2.8	6.5	--	12	357	14	6,311
Suggested	2.5	1.5	6.5	21,000	10	330	25	4,500

2020

- 2.0 million residents
- 4.9 million annual tourist visits
- 411,000 residential units

	Office Space (million m ²)	Retail Space (million m ²)	Industry Space (million m ²)	Hotel rooms	Golf courses	Schools	Tertiary Institutions	Hospital beds
Emerging	3.0	2.0	1.8	--	15	374	14	5,454
Growing	4.5	4.7	11.6	--	20	597	25	9,850
Suggested	3.5	2.5	10.0	49,500	18	450	30	6,500

2030

- 3.1 million residents
- 7.9 million annual tourist visits
- 686,000 residential units

	Office Space (million m ²)	Retail Space (million m ²)	Industry Space (million m ²)	Hotel rooms	Golf courses	Schools	Tertiary Institutions	Hospital beds
Emerging	5.2	3.5	3.3	--	25	637	27	8,418
Growing	7.7	8.5	21.8	--	35	1,017	47	15,201
Suggested	7.5	4.0	15.0	74,500	25	650	40	10,000

Figure 3.9: Market Projections
(Urban Structure Framework Plan, 2010)

The strategic vision for Abu Dhabi 2030 consists of a secure society and a dynamic open economy based on the following pillars (Abu Dhabi Economic Vision 2030, 2008);

- Premium education, healthcare and infrastructure assets.
- A large, empowered private sector.
- The creation of a sustainable, knowledge-based economy.
- An optimal, transparent regulatory environment.
- Complete international and domestic security.
- A continuation of strong and diverse international relationships.
- Emirate resource optimization.
- The maintenance of Abu Dhabi's values, culture and heritage.

- A significant and ongoing contribution to the federation of the United Arab Emirates. See Figures 3.10, 3.11 and 3.12.



Figure 3.10: Land Use Framework (Details)

(Urban Structure Framework Plan, 2010)

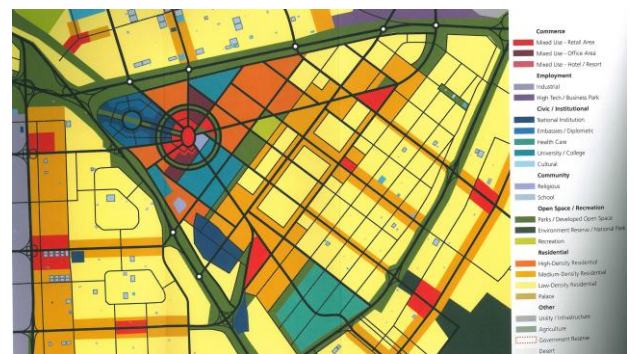


Figure 3.11: Land Use Framework (Capital District)

(Urban Structure Framework Plan, 2010)

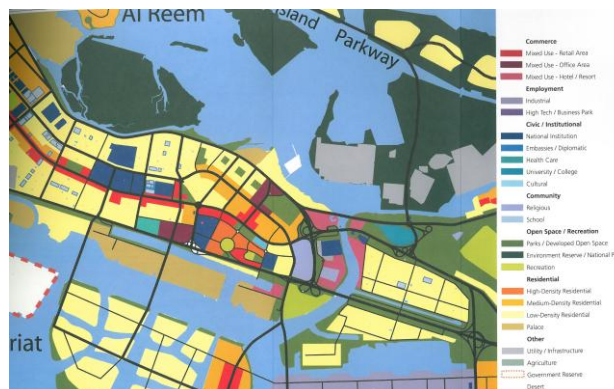


Figure 3.12: Land Use Framework (Grand Mosque Districts)

(Urban Structure Framework Plan, 2010)

The structure and functions of government in Abu Dhabi is to take place in three phases over three years, overseen by the Committee for the Restructuring of Government. The life of this committee is expected to last only until the completion of the restructure, and it will be instrumental in driving the whole of the government reform process.

Phase One

The first phase of reform includes commencement of the following programmes and initiatives;

-
- Enactment of the Executive Affairs Authority.
 - Restructuring of the General Secretariat of the Executive Council.
 - Development of Governance and Decision Rights.
 - Enactment of the Department of Transport.
 - Restructuring of the Taxi Sector.
 - Restructuring of the Department of Municipalities, Agriculture, and enactment of the Department of Municipal Affairs.
 - Organization of Abu Dhabi Government Services, specifically Buildings and Facilities Management and Logistics.
 - Consolidation of Housing and Building Activities.
 - Decentralization of Purchasing Activities.
 - Streamlining of the Abu Dhabi Water and Electricity Authority (ADWEA).
 - The General Headquarters of the Abu Dhabi Police represented by the Executive Council.

Phase Two - For completion in 2007

The second phase of reform will include commencement of the following programmes and initiatives:

- Setting up the local Department of Education, Culture, Youth and Sports.
- Setting up of a Department of Justice for the Emirate of Abu Dhabi.

Phase Three - For completion in 2008

The third phase of reform is expected to include commencement of the following programmes and initiatives:

- Creation of the Abu Dhabi and Al Ain Municipal Councils.
- Setting up a Department of Labour and Social Services for the Emirate of Abu Dhabi.
- Enactment of the Sector Committees.
- Setting up of an entity responsible for the provision of support services to government.
- Transferring the status of relevant authorities to departments.

The three phases of reform involve reorganization and outsourcing. The Abu Dhabi government is paving the way by providing infrastructure and facilities, and inviting the private sector to step in to support the government in facilitating the future growth of the Emirate. The desired outcome of the reform is a partnership in which the

Political support: The construction market has the full backing of the UAE government and is the major element in its strategic economic development plans of diversifying the economy away from pure oil dependence.

An undersupplied real estate market with significant demand for residential properties due to delivery delays during the past two years, which has left supply lagging behind demand. However, oversupply risks are a concern post-2010. The regional and international expansion of UAE players to reduce geographical risk.

Higher-than-average growth and attractive valuations.

The construction industry contributed strongly to the UAE's economic boom and accounted for roughly 7.5% of total GDP in 2007, which should grow at a CAGR of 10.8% in 2007-12, according to BMI estimates. Announced construction projects in the UAE amount to US\$300bn in 2007-12. The UAE construction market is still attractive, with more room for future growth, yet on lower levels. See Figure 3.17 and 3.18.

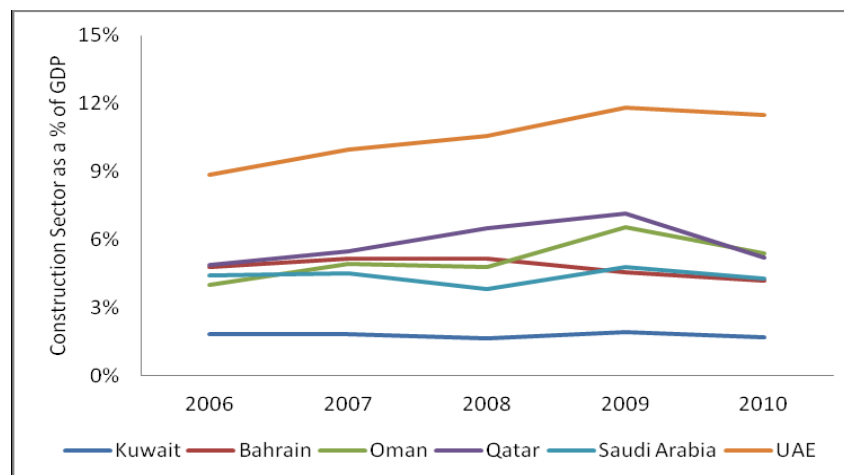


Figure 3.17: Region-wise Bifurcation of Real Estate and Construction Projects (2011)

(Source: Central Bank Report of respective countries, International Monetary Fund)

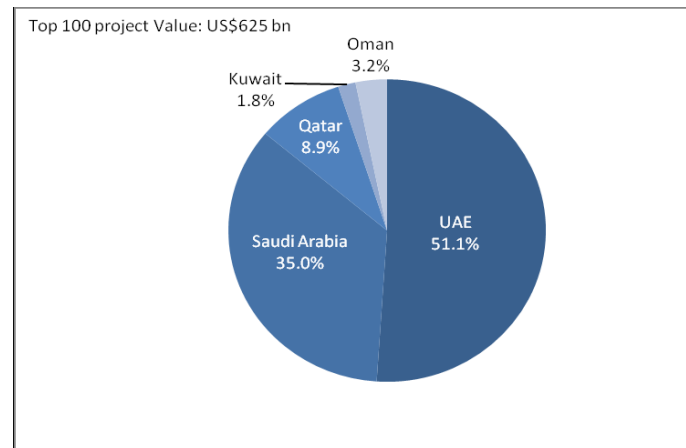


Figure 3.18: Region-wise bifurcation of real estate and construction projects in MEED Top 100 Projects in GCC (2011)

(Source: MEED Projects)

3.4.3 Construction Industry in Abu Dhabi

The UAE is one of the largest and fastest-growing economies in the Middle East. The country has witnessed massive investments in the construction industry from both public and private enterprises during the past few years. It outpaced Saudi Arabia and became the largest construction market in the GCC region in 2008. The UAE accounted for around 20% of the total Arab construction industry in 2008. Despite the sluggish growth in 2009 amidst the global financial distress, the UAE construction industry managed to record strong growth during 2007-2009 and contributed approximately 8% to the country's GDP in 2009. According to our new research report "UAE Construction Industry Outlook to 2012", the UAE construction industry is expected to grow at a CAGR of around 7% during 2010-2013. Rapid economic development is the major factor driving construction activities and infrastructure development in the UAE. The country has drawn investments from around the world. Most of the investments focus on the development of infrastructure for the hospitality, retail, real estate, and healthcare industries. Moreover, the government efforts to diversify its economy from oil-based to other industries will boost infrastructure investments in future. Despite the global economic slowdown, the UAE continues to develop several projects in tourism, housing, industrial & commercial facilities, education & healthcare amenities, transportation, communications, utilities, and ports & airports. The Emirate of Abu Dhabi is the largest of the seven Emirates that make up the United Arab Emirates, with land surface measuring 67,340 km², which is

equivalent to about 80% of the country's total area. Its coastline extends 700 km, with more than 200 islands strewn along the Emirate's territorial waters, including Das Island, 170 km north-west of Abu Dhabi city, Mabraz Island and Sir Bani Yas Island, 180 km west of the capital. Abu Dhabi Emirate is divided into three regions: Abu Dhabi Region (which includes Abu Dhabi city, the capital of the UAE), Al Ain Region and the Western Region. Abu Dhabi is the richest of the seven Emirates. It possesses 10% of the world's oil and 5% of global gas reserves, and produces 90% of oil in the UAE. Good communication, during all phases of a project life-cycle, is an important success factor that connects all the other factors of project success. For many reasons, construction projects can suffer from the lack of effective communication between the project stakeholders, and the construction project parties (El-Saboni et al., 2009). See Table 3.4 and Figure 3.19 and 3.20

Table 3.4: Construction and Real Estate Sector Contribution to GDP by Emirate

(Source: KAMCO Research & UAE National Bureau of Statistics)

Construction (AED mlns)	2006	2007	2008	Real Estate (AED mlns)	2006	2007	2008
Abu Dhabi	15,984	20,070	26,793	Abu Dhabi	12,695	15,800	18,801
% of Sector	36.7%	36.6%	38.7%	% of Sector	22.5%	23.0%	24.0%
Dubai	19,118	24,186	29,130	Dubai	33,944	39,228	44,419
% of Sector	43.9%	44.1%	42.1%	% of Sector	60.2%	57.1%	56.6%
Sharjah	5,277	6,467	8,092	Sharjah	5,882	9,024	10,291
% of Sector	12.1%	11.8%	11.7%	% of Sector	10.4%	13.1%	13.1%
Other Emirates	3,146	4,159	5,203	Other Emirates	3,903	4,624	4,986
% of Sector	7.2%	7.6%	7.5%	% of Sector	6.9%	6.7%	6.4%

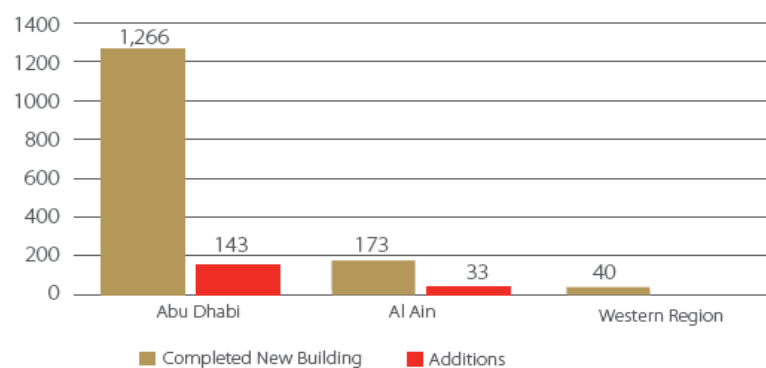


Figure 3.19: Number of Building Completions by Building Type and Region, March Quarter 2011 (Source: Abu Dhabi Statistic Center, 2011)

Major construction investments in Abu Dhabi	Investment Value US\$ M Value AED M
Industrial parks	762.0 2,796.5
Shopping centres	482.0 1,768.9
Commercial buildings and offices	310.0 1,137.7
Residential	116.0 425.7
Healthcare	100.0 367.0
Hotels	240.0 880.8
Government offices	45.0 165.2
Sports infrastructure	28.9 105.9

Figure 3.20: Major investments in Abu Dhabi (Source: BMI)

Back in 1975, the total population of the Emirate of Abu Dhabi was about 211,812 people. This figure grew to more than 2.12 million people in 2011. Statistics Center - Abu Dhabi (SCAD) estimates for 2012 put the number of the Emirate's residents at 2,120,700 people. This indicates that the population of the Abu Dhabi Emirate from December 1975 to June 2011 increased about 10 times in 36 years. Of the total Abu Dhabi Emirate population, 439,100 people (more than 20%) are Emirati citizens. About 236,000 (53.7%) of the citizens live in Abu Dhabi Region, and about 178,500 (40.7%) in Al Ain Region, leaving 24,600 (5.6%) in Al Gharbia. The non-citizen population of 1,681,600 people comprises almost 80% of the total resident population. Of the non-citizens, 1,074,300 people (63.9%) live in Abu Dhabi Region. More than 70% of the populations of Abu Dhabi Emirate are males, due to an influx of male migrant workers (Statistic Center Abu Dhabi, 2012).

The Emirate of Abu Dhabi has witnessed over the past few decades the most outstanding features that characterized the emirates' economic and social developments, driven by the strong support directed towards the implementation of infrastructure projects of the national economy. This has a significant impact on the subsequent growth across all production and service sectors, especially the real estate sector, which has seen significant developments in the sizes and types of housing, service and commercial units necessary to meet the growing demand in this area. The rapid growth in construction activity in the recent years has attracted huge investments to this sector, making it one of the most dynamic sectors and an important branch of activity in the diversification of the economy (Statistic Center Abu Dhabi, 2012).

According to the economic survey conducted by the Statistics Centre Abu Dhabi 2012, the construction activity contributed 10.1 per cent to the GDP in 2011, compared with 13.0 per cent in 2010. Building permits statistics show that the number of residential building permits issued in 2011 reached 9275, an increase of 19.7 per cent compared with 2010. In addition, 6458 non-residential building permits were issued in 2011 compared with 3785 in 2010. The number of building permits issued for construction of new buildings represented 14.3 per cent of the total number of building permits issued in 2011. See Table 3.5 and 3.6

Table 3.5: SWOT Analysis - UAE Construction industry

(Source: Oryx Middle East; Construction Industry in the UAE Strategic Assessment)

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Oil-rich country • Political stability • International business and investment from overseas • Growing non-oil sector • Tax-free environment 	<ul style="list-style-type: none"> • Attractive salaries • Inflation growth • Currency value instability (AED peg to USD) • Oil production spending increase, government saving decrease • Shortage of skilled manpower • Image of the 'Disney World in the desert' • Disparities between Emirates
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • The rise in oil income • Progress toward diversification into service sectors such as high-tech, logistics, ports, tourism, financial services, health, education and media • Global increase in oil consumption and oil price rise • Private-sector-led economic expansion promotion 	<ul style="list-style-type: none"> • Restart of Iran's nuclear weapons programme • Conflicts in the GCC region and worsening security • Downside risks from the global economy • Worsening international financial market conditions • Competition from other emergent markets in the Middle East and worldwide

Table 3.6: SWOT Analysis - GCC Construction (Source: BMI)

Strengths	Opportunities
<ul style="list-style-type: none">• One of the most liberal trade regimes in the GCC and attracts strong international capital flows• High number of expatriate workers at all levels of the economy, making up for the otherwise small workforce• Progressively diversifying economy, minimizing vulnerability to oil price movements• Government-supported infrastructure spending in transport and utilities expected to intensify in line with increasing demand levels• Clear regulatory environment and governing private investments creates a favorable climate for investment in infrastructure• State-owned utilities (ADEWA, DEWA etc) are willing to take on majority equity stakes in projects and provide government guarantees in order to attract investors	<ul style="list-style-type: none">• Favorable macroeconomic outlook as oil prices are expected to remain high (by historical standards)• Economic diversification into gas, tourism, financial services and high-tech industries offers some protection against volatile oil prices• Despite the impact of the 2009 downturn, the tourism and financial sectors still have good growth prospects, driven by domestic and foreign investment• Decline in cement and steel prices in the region reduces the cost of new projects• Government willingness to allow private participation in infrastructure• Becoming a hub for renewables and green tech, with Masdar spearheading new ventures
Weaknesses	Threats
<ul style="list-style-type: none">• Rising unemployment due to contraction in the construction sector.• Project finance operations are onerous, while the credit markets remain skeptical of Dubai after the decline of the real estate market• Shortage of power and water in new buildings as rapid growth of the residential and commercial construction sectors has not been matched by an equally rapid growth in local utilities sectors	<ul style="list-style-type: none">• Political instability in the Middle East region could affect investor perceptions• Several high-profile construction projects have been delayed and fear of another property market crash could threaten future development

Source: Business Monitor International

The construction industry in Abu Dhabi saw \$35.5 billion contracts awarded in 2010. Moreover, a current combined total project award across all sectors for 2011 reached \$39.8 billion, including building, oil and gas, petrochemical, power, water and infrastructure of \$562.8 billion. Abu Dhabi's population is expected to grow to 5 million by 2030. The government has earmarked \$15bn for expansion of infrastructure projects between 2009 and 2012, to meet water, power and sewage demand. This infrastructure expansion has allowed Abu Dhabi to embark upon some of the most ambitious infrastructure projects in the Middle East, including large road and highway developments. With the rapid growth, water and electricity demand is expected to rise up to 8% a year over the next five years. However, the Abu Dhabi Water and Electricity Authority (ADWEA) have initiated plans to invite proposals to build a power plant worth about US\$2 billion to meet the ever-increasing demand. Abu Dhabi is still very much a developing market. The Emirate focuses on providing a sustainable future for the country, diversifying its core competencies. Oil revenues are not likely to run out in the near future, but neither are they an unlimited source of capital. The downturn did have an impact on some projects, but those that have demonstrated longevity, sustainability and offer something back to the local environment – whether that be social or economic – are being pushed ahead as part of the overall plan to develop the Emirate.

3.4.4 Influence of AD developments on future projects

The foregoing overviews of AD and its prosperity has placed it in a position to undertake many construction projects. Most of these are large projects. The indications are that many more projects will be initiated and procured in AD going into the future. Many factors will contribute to the success of these projects and leadership is one of these. Thus if leadership can be made more efficient in projects, it would contribute to their success. Thus the trends of progress of AD support the course of this research, which is to enhance the efficiency of leadership in construction in the UAE. Another influence and contributor to project success, particularly in the UAE, would be culture; which is considered next.

3.5 Culture

Culture is one of the most discussed definitions. There is no clear overruling definition of culture. Although the meaning of culture is almost understood by every person, formulating a defined synonym is still a frontline of discussion for scientists. Exploring the different definitions of culture, a summary could be made by bringing two of the clearest definitions together. These two combine the scattered attempts by many researchers and gives an overall overview.

According to the scholars of the National Center for Cultural Competence of Georgetown University (ref, date), culture means:

“An integrated pattern of human behaviour that includes thoughts, communications, languages, practices, beliefs, values, customs, courtesies, rituals, manners of interacting and roles, relationships and expected behaviours of a racial, ethnic, religious or social group; and the ability to transmit the above to succeeding generations.”

And according to scholars of the National Conference of State Legislatures the definition of culture is:

“A specific set of social, educational, religious and professional behaviours, practices and values that individuals learn and adhere to while participating in or out of groups they usually interact with.”

While these are general meanings and definitions of cultures, an attempt has been made to implement these different values in dimensions. These dimensions would give an understanding of how culture influences the working values of employees, managers, leaders or other participants of organizations existing in a specific country.

3.5.1 BIM and Design Culture

Building information modelling is transforming the way we design. In a relatively short time, using this technology for designing buildings has challenged conventional thinking and begun to create a new standard for the entire industry. The technology is nothing short of revolutionary. However, managing BIM's effect on an organization's design culture has its challenges. People come with varied design expertise, experience, and tenure, the rapid change can be difficult, and to change the organization's culture a lot of time is required. Implementing BIM across the organization needs to be seen as advancement rather than a reform. Correctly evolving to use BIM to deliver outstanding design to clients while collaborating with partners and developing new talent can mean the difference between being better positioned and more profitable or being left behind. Successful design companies want to be at the leading edge of innovation and technology faced with a lot of opportunities and challenges implementing data-driven design and modelling tools. BIM design culture change requires education and training so that competency, capacity, and expectations are well established and there is a better understanding of BIM among the staff.

The design culture is affected by three interrelated factors: collaborative design, generational differences, and mentoring. Collaborative design is a foundation for design excellence. Fully integrated multidisciplinary design and technical expert teams from across the company work in multiple office locations to provide design services. This creates a team with a wide diversity of design backgrounds. BIM helps to facilitate this critical collaboration. Generational differences are obvious in design organizations today. As with all innovations, BIM implementation is related to how generational differences are managed. Changes to the design culture of an organization can greatly affect tenured professionals, and are related to the years spent practising in a certain way. For some experienced professionals, learning new work habits and design leadership skills to manage the earlier phases of a BIM project could be the bigger challenge.

BIM is dependent on someone who knows how to put buildings together. This provides an additional challenge because many careers have depended on drawing lines as directed by someone else. Mentoring is an effective process, and is essential because new talent always affects the design culture of an organization. The process of

mentoring or developing that talent must also evolve with BIM. Fortunately, students coming out of school now have 3D modelling experience. Therefore, it is a small step for them to start drawing with building components in 3D software platforms or understanding BIM concepts and technology. However, the challenge is that to use most BIM tools to best effect, you need to know how a building is actually built. This is where the relationship between the more experienced architect and the less experienced architect reaches its nexus.

Mentoring less experienced architects to concentrate on learning how to draw details first, then having their work marked up by more experienced practising architects, can lead to an eventual understanding of the bigger picture. It was not always a relational process. BIM gives less experienced architects an opportunity to learn how a building is built much earlier in their careers. Most BIM software platforms are intuitive tools, and an experienced professional can learn BIM in a relatively short period. Moreover, young or new staff can learn how buildings go together in software rather than through theoretical concepts and menial tasks. New talent stimulates the design culture of an organization. Young designers bring fresh and innovative ideas, and it is important that they understand the full impact of BIM on the entire practice as well as it is vital that design leaders and mentors connect and nurture these young designers for the future.

3.6 Introduction to Arab Culture

The UAE forms a part of the geographical subdivision of southern Arabia, together with its western neighbour, Qatar, and its eastern neighbour, the Sultanate of Oman. Arab countries are religiously and ethnically diverse, with Islam being the dominant religion in most countries. Additionally, while 85-90% of the Arab population is Muslim, only about 20% of the world's Muslims are Arab (Kimball, 1984). The cultural identity of the Gulf region is strongly represented in its language and religion. The official language of the Gulf is Arabic, a language that provides a very strong sense of collective identity to Gulf nationals (Katzner, 1986). The dominant religion is Islam, a word that translates to mean "submission to the Will of Allah and obedience to his laws" (Abdalati, 1975), and a Muslim is "one who submits". These laws are set down in the Quran and religion guides behaviour to a realm far greater in every aspect of daily life.

The UAE has a group-oriented culture, with much of the focus falling on family and religion. The religion of Islam is also an important aspect of the society's collective nature.

Many of the central beliefs of Islam involve sacrificing one's individual needs for the greater good. Many of the beliefs and actions of the Arab people are integrally connected to their identity as Muslims. Arab culture is also based on certain values and ethics; society such as family and tribe play a very crucial role. Family is the centre of everything, where the father has first and last word. Friends are on the periphery, but courtesy is given to all. Honour is very important amongst Arabs and it will be protected and defended at all costs. Shame is avoided (especially against family) at all costs, and insults and criticism are taken very seriously. Time, on the other hand, is less rigid; the approach to time is much more relaxed and slower than that in Western cultures. Governments are secular, although they still emphasize religion (Barakat, 1993).

In 2011, the Korn Ferry Institute carried out research on business leadership of the Arab World. One of the topics discussed was change in Arab culture, where many long-established family firms are passing their businesses to their third generation; the stage at which such enterprises historically ran out of steam. Globalization and the erosion of national barriers to trade and investment, more and more force competition upon them. Increasingly, they have to contend with the very best. These shifts are persuading the traditional base of family-owned enterprises to look outside themselves for new blood, for professional management, and for market discipline. With the daunting probability of a third-generation failure, the recruitment of non-family, key management personnel also provides for an unbiased, capable approach, but only if power is relinquished to the 'outsider' in favour of ownership-management separation. The inclusion of such corporate governance is now more crucial than ever. Mohammad Al Fahim, chair of one of UAE's top organizations, the Al Fahim Group, stated, "In the GCC, family businesses are relatively young with most of them less than 60 years old in the market. In order to survive, grow, and take our places among the many family-run firms in the region and to blossom, we need government support and backing similar to that which was during the leadership of the late Sheikh Zayed Bin Sultan Al Nahyan when he supported local companies by ensuring them government work and purchasing their products and services."

According to Sheikh Nahyan Bin Mubarak Al Nahyan, the UAE's Minister of Higher Education and Scientific Research, "Family businesses in the region are one of the most important pillars of economic activities in the Middle East as they play a key role in accelerating economic growth and contribute actively to the process of economic development in such countries. The most successful family businesses in the country are

one which strikes a perfect balance between responsible business ownership, professional management, and pleasant family dynamics.”

Handing over the reins may not be the easiest decision or transitional period for a family business in the Middle East. But given the key role they play in accelerating economic growth and contributing to the overall economic development in the region, it is a delicate but crucial process that needs to be done efficiently and thoroughly. If done well, the chosen successor may just be able to succeed (Gulf News, 2012).

Hofstede’s (1980) research study on culture dimension indicated that the values of cultures differ along the four dimensions of power-distance (level of hierarchy, equality and participative decision-making in a society), uncertainty-avoidance (extent to which uncertainty and risk are tolerated), individualism (family loyalty and selfishness in a society), masculinity (the level of assertiveness, aggression, confrontation in a society) were scored.

Table 3.7 provides a comparative score for the UK and Arab countries.

The power-distance dimension deals with the fact that not all individuals in societies are equal and it expresses the attitude of the culture towards these inequalities amongst us. Power distance is defined as “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede, 1980). Arab countries score high on this dimension (score of 80) which means that people accept a hierarchical order in which everybody has a place and which needs no further justification. Hierarchy in an organization is seen as reflecting the characteristic of imbalances, centralization is accepted, subordinates expect to be told what to do and the ideal leader is a compassionate autocrat.

Table 3.7: Comparison of Arab and UK values based upon Hofstede's dimensions

(Source: Hofstede, 1980)

Value dimension	UK	Gulf States
Power distance	35	80
Uncertainty avoidance	35	68
Individualism	89	38
Masculinity	66	53

Uncertainty-avoidance is the dimension to do with the way that a society deals with the fact that the future is unknown, whether the future should be controlled or not. This uncertainty

brings with it anxiety, and different cultures have learnt to deal with this anxiety in different ways. The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the score. Arab countries score 68 on this dimension, and thus have a high preference for avoiding uncertainty. Countries exhibiting high uncertainty avoidance maintain rigid codes of belief and behaviour, and are biased against unorthodox behaviour and ideas. In these cultures there is an emotional need for rules (even if the rules never seem to work), time is money, people have an inner urge to be busy and work hard, precision and punctuality are the norm, innovation may be resisted, and security is an important element in individual motivation.

Individualism is the fundamental issue addressed by this dimension in terms of the degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "we". In individualist societies, people are supposed to look after themselves and their direct family only. In collectivist societies, people belong to 'in groups' that take care of them in exchange for loyalty.

The United Arab countries, with a score of 38, is considered a collectivistic society. This is apparent in a close long-term commitment to the member 'group', be that a family, extended family, or extended relationships. Loyalty in a collectivist culture is supreme, and outweighs most other societal rules and regulations. The society adopts strong relationships where everyone takes responsibility for fellow members of their group. In collectivist societies, offence leads to shame and loss of face, employer/employee relationships are perceived in moral terms; employing and promotion decisions take account of the employee's inner circle, and management is the management of groups.

Masculinity score (masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner/best in field – a value system that starts in school and continues throughout organizational behaviour. A low score (feminine) on the dimension means that the dominant values in society are caring for others and quality of life. A feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable. The primary issue here is what motivates people, wanting to be the best (masculine) or liking what you do (feminine). Arab countries score 53 on this dimension and can be considered to be neither masculine nor feminine.

3.7 Influence of Arab Culture on Construction

In UAE, the construction industry contributes almost 75% of non-oil GDP, besides being a vital source of employment. In the first quarter of 2004, almost 6000 construction companies were registered; 2119 buildings were completed, which includes 1436 villas and residential complexes, 393 multi-storey commercial buildings and 290 industrial, entertainment and service buildings (Rettab & Bakheet, 2005).

According to EFG-Hermes, an Egyptian investment bank with offices in Dubai, the real estate and construction sectors have become the centrepiece of Dubai's economy. In 2003, the construction industry had around 111,700 employees, which was 15% of the total employees in UAE, with a soaring trend to meet the demand due to the increasing volume of construction. During the period 2000-2003, the number of employees in the construction industry in Dubai increased by 33%. Moreover, after allowing expatriates to own property in Dubai in 2002, the freehold market and the property market have witnessed a remarkable growth that has contributed to the expansion of the construction industry.

In 2005, Hanware estimated that at least \$50 billion of residential projects will be built in the next four years, of which at least 85,000 will be new homes. In 2006, the UAE saw the peak of the property boom, because in March 2006 a foreign property ownership law came out and a deluge of foreign money came in, creating a market for Dubai's unparalleled ambition in creating a skyscraper city, and numerous reclaimed land projects. Yet, at the end of 2008, foreign investors suddenly disappeared, as the global financial crisis bit in the Emirates. The end of the previous rapid turnaround on speculative buying has caused transaction volumes to plummet. However, the degree of decline varied across different developments. According to a report published by Asteco property consultants, despite the decline in 2008, the increase in the first three quarters of 2008 resulted in an average growth of 6% in apartment prices (Global Investment House, 2009).

3.8 The Outstanding Problems

Some of the outstanding factors identified during construction projects:

- (1) During the initiation and planning phase: Lack of clear definition of the project scope, which can lead to changes in the execution phase, resulting in variations in time and costs.

(2) Client intervention: Most clients are market-driven and tend to expedite the project phases either by using a fast-track approach or by squeezing the time allocated to the initiation and planning phase. Client's intervention is one of the major factors leading to variation. Despite hiring qualified project management firms, clients insist on playing a leading role in the approval of the design, the selection of the subcontractor and materials, and introducing changes. This causes delays in approvals and in many cases affects the quality of decisions made. In addition, there are cultural aspects that sometimes lead to preferring relationships over competences in the evaluation and selection processes, especially for subcontractors and suppliers. The construction market in UAE in general does not operate in isolation from the other sectors. Clients are mainly developers and investors with portfolios that embrace other businesses. In making decisions for construction projects, investors in UAE often have other considerations not aligned with the project management professional's approach and best practices. However, continual intervention of clients in the key decisions through the project life-cycle is a real concern.

(3) External factors: Other factors that affect the construction industry and lead to unfavourable consequences in the short term, are manifested in shortage of skills and machinery in general, and specialized subcontractors in particular. The rapidly-growing economy of the UAE is associated with a fast-moving mechanism of decision-making that relentlessly reviews the rules and regulations to cater for the needs of the fast-growing economy. Such changes may cause a gap between demand and supply in the construction industry. The lag in supply, such as a shortage in skills, subcontractors and machinery, is identified as an important cause of the variations in projects.

The temporary multi-organizational nature of construction can also be potentially problematic for the conventional analysis of leadership, because the analytical lens on leadership has previously emphasized leaders as individuals within organizations from an intra-organizational viewpoint; there is therefore the challenge to locate leadership when a multitude of organizations are involved in delivering construction projects. Chan, Cooper and Tzortzopoulos (2005), for instance, highlighted the difficulties of identifying leadership across organizations as one of the main problems of embracing organizational learning in construction. It is relatively easier, if misleading within the construction context, to talk about leadership within a particular organization, given the dominance of the individualistic idea of leadership. The added complexity of leadership from an inter-organizational perspective is more challenging to examine. The various actors that form

supply relations in construction would mean that it is harder to delineate the concept of leadership across the various stakeholders. Indeed, London and Kenley (2001) posed this fundamental question: “what are the power relationships between firms and their suppliers along the chain? How do we analyze such fundamental structural and behavioral properties in the supply chain?” (p.786). A plausible way to better conceptualize leadership in construction would be to move away from the individualistic idea of leadership, instead of personifying leadership and to locate leaders in individuals with authority. It would be more appropriate, as Wood (2005) suggested, to view leadership as an emergent process.

3.9 Culture and UAE Construction

The United Arab Emirates is the longest-running successful federation anywhere in the Arab world that has matured to become a country, which not only offers its population a modern perspective, but also is widely recognized as having a significant role to play within the global community of nations (Abdalla & Hellyer, 2001).

Even though there are literature reviews and research on the statistics of the construction sector, these are mainly based on data gathered globally. Most of the research is from a general construction management perspective, usually focusing on data gathered region-wise like the UK and US. Testing of data from UAE is very limited compared to the various efforts made by the industry to solidify its presence and economic stand. The past forty years have witnessed rapid economic, community, and cultural development in the United Arab Emirates and the broader Gulf region. However, research regarding these changes, their impact on the Arab world, and implications for the future has been limited, providing little assistance to the region’s decision-makers. UAE literacy is handed on as a tradition among families.

The UAE government is very devoted to its culture and history (UAE Interact Cultural Center, UAE National Media Council) and that is evident from the several developments across the region. Since early 2000, such developments and measurements were established to record and maintain literature, statistics and data. Historic information and data collection is in process by some of these organizations.

On 28 April 2008, Abu Dhabi established its first official source of statistical data in the Emirate, called the Statistics Centre, in accordance with Law No. (7) 2008 promulgated under a decree by HH Sheikh Khalifa bin Zayed Al Nahyan. SCAD was responsible for the task of developing and organizing statistical work in the Emirate of Abu Dhabi and the

production, analysis and dissemination of all the official statistics of Abu Dhabi Emirate (SCAD, 2008). The annual economic report on UAE was first published in 1992 and the statistical yearbook of Abu Dhabi was published in 2009. The Abu Dhabi Chamber of Commerce & Industry, since its inception in 1969, has been working and co-operating with the government and partners towards streamlining and regulating business and industrial affairs in the Emirate of Abu Dhabi. The chamber has overviewed and recorded the various activities of various industries and sectors, and their first annual report was launched in 2006.

Even though the resources are present in the aspects of UAE origin, culture and industry sectors, such resources are very limited. The limitation has encouraged us to undertake further research and gather information for review. Most of the substantial literature found, such as documents, files, and research papers by unknown credentials, have been reviewed further in the analysis stages of this research.

3.10 Impact of the literature review on the research aim and objectives

Leadership styles and culture are important to discussion and understanding of successful project manager style. Both projects culture and leaders are important. A good leader can certainly influence project outcomes. Hence this chapter has considered the aspects of UAE culture, its growth and its impact on construction projects. These aspects were considered for incorporation in the empirical study. This has contributed to Objective No. 1 and 2 which seeks to look at the position of things in Abu Dhabi pertaining the types and styles on leaders in construction projects along with cultural aspects. The companion Chapter 5 which concerns Joint leadership in construction projects was also established from the literature review of Chapter 2 and Chapter 3.

3.11 Summary of Chapter 3

In this chapter, construction, projects and the importance and influence of project managers have been discussed. Having emotional and human empathy was also discussed as a factor in the success and failure of any construction projects. In spite of advances in the project management profession, research studies have shown that many projects fail, underlining the importance of the project manager's role as manager. Specifically, the manager's leadership role is of great importance in motivating people and creating an effective working environment in order for the project team to meet greater challenges in today's

global economy. This chapter also discusses the quality of the project manager in delivering a successful project.

This chapter discuss Abu Dhabi and how it is progressing in size and prosperity and this growth is bringing many construction projects into the landscape of the city and country. Obviously leadership plays a role in successful implementation of projects. This makes the current research much worthwhile and timely.

Culture also influences how people behave. It is in this context that culture was discussed in this chapter. The Arab culture was expectedly covered. Due to the significant influence of culture on behaviour, these two constructs and their connection have been considered for investigation in the course of this research. Accordingly, objective number 2 of this research (see section 1.3) pertains to culture and leadership has been addressed. Having reviewed literature in Chapters 2 and 3, the next Chapter will introduce the research methodology and research design.

CHAPTER FOUR

Methodology

4.1 Introduction

The discussion in this chapter provides a detailed description of the research methods adopted for this study. It highlights the type of research for answering the research propositions towards achieving the aim and objectives. In addition, it outlines the procedures adopted for conducting the research including the sampling of respondents and use of ethical procedures. Finally, the method and tool for data analysis are discussed.

4.2 Research Purpose

The objective of this research study is to carry out a literature review on group leadership theories and analyse the data to evaluate the operational effectiveness and the associated impacts on project management leadership on the construction industry in Abu Dhabi, with particular emphasis on the Joint leadership model.

The purpose of using qualitative research is to analyse the data by means of interpretation and to gain information from participants (Cooper & Schindler, 2006); the content analysis method was used (standard qualitative thematic analysis) to complete the coding. Qualitative research methods were a convenient choice for this study since they allow for change. A questionnaire was used to collect data from a group of project management leaders and project managers.

This research is seeking to add to the framework of those project managers who wish to use the Joint leadership process and to shed some light on the literature relevant to the influence of leadership styles, the types of leadership styles used by project managers, and the impact of culture on project success. Hence this study draws conclusions on the effectiveness of project manager leadership from theories and practices and provide recommendations and schemes proposed to find the best method of implementing effective project management leadership.

4.3 Research philosophy and Methodology

Research methodology considers the philosophical underpinnings of especially the researcher to inform the choice of research strategies and design. Research philosophy is introduced here by discussing epistemology, axiology and ontology. The researcher's world views from these discussions as well as the research objectives are the pooled into devising the research strategy and design.

4.3.1 Epistemology

Selecting a data-gathering method to perform the research, and the choice of methods to be used, are largely influenced by the research methodology chosen. The methodology is mainly influenced by the theoretical perspectives to be adopted and consecutively by the researcher's epistemological stance. Deciding at an early stage to use a structured questionnaire as part of the survey and to research the relationships between the respondents' viewpoint and the type of respondent (e.g. age, occupation, etc.) is in fact adopting an objectivist approach. Hence it could be assumed that epistemology is relevant to the research. In the simplest terms, epistemology is the philosophy of acceptable knowledge, or of how we come to know what we know (Knight & Tumbull, 2008) especially in explaining the relationship between the researcher and the topic of research. Epistemology tries to understand what it means to know and provides a philosophical background for deciding what kinds of knowledge are legitimate and adequate. There are two dominant and divergent epistemological positions in research (Ponterotto, 2005), positivism and interpretivism. Positivism originated from the idea that the world follows fixed laws of cause and effect, and stresses objectivity, measurement and repeatability in the study of natural or social phenomena (Ponterotto, 2005). Interpretivism, on the other hand, is founded on the belief that reality is subjectively constructed, and the researcher has to constantly interact with the object of the research from within (Creswell, 2012) to find out insightful significances through interactive communication and interpretations (Ponterotto, 2005). This means the more the researcher interacts with the participants in their natural setting, the more they get to know what they know about the topic researched. Henceforth in this research 90 participant were involved in there project management which deal with leadership and culture aspects in Abu Dhabi Police.

4.3.2 Axiology

Axiology, or value theory, represents an attempt to bring the disparate discussion of values under a single heading, covering a wide area of critical analysis and debate that includes truth, utility, goodness, beauty, right conduct, and obligation. Axiology has relevance to the field of qualitative research as it has a direct bearing on the ethical context of research, offers an important basis for making explicit the assumptions of different paradigms of research, and provides the foundation for understanding. As far as axiological position is concerned with the role of the researcher's values, it intuitions and biases the research process (Ponterotto, 2005). Hence the researcher's position is important. Accordingly, if the researcher takes an objective position, the research process arguably is graded as less valued, as the researcher's values become less important. If he takes a subjective position, such values and experiences cannot be separated from the research process. Although there is no agreement on the importance of formally acknowledging the extent to which the researcher's own values influence the research process – reflexivity – it still remains a necessary process in qualitative research (Strauss & Corbin, 2007). As axiology provides conversion to the discussion and relates the researcher's position in the research process, hence it should be taken as an added value element in the research process.

4.3.3 Ontology

Ontology is the philosophy of assumptions about the variety of phenomena in the world. It is a theory of the nature of reality (Delanty & Strydom, 2003); it is a theory of being and is concerned with issues of what exists and refers to the claims that a particular paradigm makes about reality or truth (Hitchcock & Hughes, 1989). In simpler terms, ontology is about what exists, what it looks like, what components make it up and how the components interact with each other (Hitchcock & Hughes, 1989). Likewise, as with epistemology, these issues can sometimes have a major impact on methodology, and any contrasting ontology of human beings in turn can sometimes demand different research methods (Burrell & Morgan, 1979; Cohen et al., 2000). Ontological questions are those that tend to relate matters of real existence and action (Denzin & Lincoln, 2011). The two divergent perspectives on the nature of reality are objectivism and subjectivism. The objectivism position views the existence of reality as external and independent to the perception of social entities. The subjectivism position views reality as a subjective experience, whereby multiple realities can exist depending

on the relative perceptions of individuals (Ponterotto, 2005). In summary, ontology tries to investigate characteristics of the common-sense physical and perceptual world, to find different ways of constructing reality. Perception of a respondent about project size, e.g. what is a big project and what is a small project, is one example of ontology.

4.4 Research strategy from the perspective of philosophy

This research is guided by the principle that efficiently solving challenging real-world problems requires a synthesis of rigorous techniques from multiple sub-areas of operations research. Process-oriented interpretative approach has been used for intercultural communication because it is based on the assumption that individuals are active agents, interpreting their social environment while also influencing it.

Qualitative research emerges from phenomenological and interpretive paradigms and is widely used in the fields of anthropology and sociology (Casell & Symon, 2004). Typically, the emphasis of qualitative research is on constructivist approaches where there is no clear-cut objectivity or reality. Instead, social life is seen as emerging from the shared creativity of individuals (Casell & Symon, 2004). Worldviews of a socially constructed reality are acknowledged as primary to data analysis in qualitative research (Cassiday, 2005). A researcher's underlying ontological assumption in qualitative research is that reality is subjective – not scientifically objective and not absolute (Cassiday, 2005). As a result of the underlying epistemology, research is less driven by very specific hypothesis and categorical frameworks, and more concerned with emergent themes and idiographic descriptions (Casell & Symon, 2004). Qualitative research usually emphasises an inductive approach to the relationship between theory and research. The main purpose with qualitative research is to understand the world and its meaning as the research object sees and understands it. Qualitative research methods are commonly used when the research is designed to provide a thorough description of a specific subject.

Quantitative approaches seek to collect factual data and to study and establish relationships. Scientific techniques are used to obtain measurements that enable hypotheses to be tested (Fellows and Liu, 1997). Quantitative research was further classified by Naoum (1998) as;

- a- Objective measurement: Through this type a few techniques such as structured questionnaires, simulation models and physical experiments are used to obtain reliable, hard and tangible data.

main quantitative assessment was validated by a qualitative approach; hence the triangulation.

The research methodology adopted for this study was effectively a mixed-method approach, but principally quantitative and deductive, in order to provide an insight into the effectiveness of project manager leadership from theories and practices (Johnson et al., 2007). The mixed-method approach was a convenient choice, as some aspects of the research required quantitative evaluation mechanisms while other aspects, especially the validation, required deeper investigation into the Abu Dhabi project participants. The mixed-method approach facilitated the collection of diverse data and consideration of a deeper exploration of leadership styles and their underpinnings (Bryman, 2001).

4.5 Research Design

Research design considers the research methods to be used. Since the strategy adopted above was mainly 'quantitative', the methods which are applicable are experiments, quasi-experiments and surveys. In the present study, an experiment was discounted as the situation on hand did not fit into that context. The aim and objectives sought to establish if (joint) leadership did influence project outcomes and not how (much) the former influenced the later; hence an experiment was unwarranted. Therefore, a survey was adequate to address the aim and objective of the research.

4.5.1 Survey

Survey has different definitions in different contexts. But here in research context, it is to examine the condition, situation, or value and/or to query (someone) in order to collect data for the analysis of some aspect of a group or area (Merriam-Webster, 2015).

In this regard, the views of these project leaders on Joint leadership would be surveyed through questionnaires, meeting and focus group meetings.

4.5.2 Data collection approach

The research process includes a comprehensive literature review of leadership, plus a comprehensive study of theories of leadership as well as a comprehensive study of types of leaderships. The research discusses the quantitative and qualitative data collection. Questionnaires were used to collect data from a group of project management leaders and project managers to identify methods, styles and suggestions related to leadership

processes, which were found to be very effective in Abu Dhabi. Fieldwork was carried out to investigate how effectively project management leadership could be implemented in an organization in the UAE. This was investigated using structured questions where a questionnaire was deemed appropriate for surveying the opinions of project leaders.

The research also aimed to find out what are the difficulties and challenges were involved in the implementation of Joint leadership; and these were investigated by means of open-ended questions.

For the validation of results, however, the collection of information was through semi-structured in-depth interviews. It is the one of the most widely-used qualitative methods in organizational research (Casell & Symon, 2004). An interview guide which should consist of an overview of the themes that should be covered during the interview as well as proposed open-ended questions on each theme (Casell & Symon, 2004), was developed prior to the interviews. However, semi-structured interviews are also open for changes with regard to how the questions are asked, and the order of the covered themes is adjustable. The interviewer should be flexible and let the interviewee play an active role in shaping the interview, while at the same time making sure that all themes are covered at one point. Furthermore, interviews with local leaders and experts in the field of leadership were conducted; conclusively propositions, research plan, recommendations and scheme were proposed to find the best method of implementing effective project management leadership.

4.5.2.1 Part A Data Collection - Use of Questionnaire

. The questionnaire is divided into five main sections:

- Demographic & general information
- Leadership style
- Leadership type
- Impact of joint leadership on construction project success in the UAE
- Impact of culture on construction project success in the UAE

The set of questions used are attached in Appendix (A).

4.5.2.2 Administration of the Questionnaire

The questionnaires were sent / posted to the participants by email and also administered through face-to-face contact. The data collection process was conducted for 60 days in August and September 2013.

Most of the participants showed their willingness to participate in the questionnaire survey in order to improve this important aspect of project management practice in the UAE.

4.5.2.3 Response Rate

Questionnaires were sent to one hundred and forty-five (145) project managers in Abu Dhabi in the UAE, and 90 responses (62%) were received from 75 males and 15 females. Forty respondents had acquired experience in excess of 10 years. Thirty-three respondents described themselves as line managers, 37 as middle-level managers and nine as top-level managers. Thirty-seven respondents described themselves as project managers, 14 as project engineers, eight as design managers, two as cost control managers, one as a quality manager and 23 as another category.

4.6 Population and Sampling

The target population for this study was project managers, defined as project manager, project engineer, design manager, cost control manager, quality manager or HSE manager who were involved with or had experience with projects. Data were collected through the questionnaire responses. Participants were approached and followed up through emails and face-to-face contact.

In-depth analysis by past researchers into the project management leadership and culture impacts have shown mostly people related to the projects to be involved in the investigative methodology. Here project managers and other relevant second management have been involved in the sample for quantitative as well as qualitative samples of research. One hundred and forty-five (145) respondents were selected randomly from different projects and approached by email for their response to the questionnaires. But only ninety (90) responded to the survey questionnaire (62%). The percentage of respondents remained reasonable. Depending upon the number of projects and personnel involved in them in Abu Dhabi, the number of completes could be graded as good. A rough guideline requires 100 completes for every 1,000,000 of population (SurveyMonkey,

2014). This sample would also be sufficient against 95% confidence level with 5% error margin.

4.6.1 Validity and Reliability

Validity and reliability refer to the rigour associated with a research process and the trustworthiness of the findings (Roberts et al., 2006). Validity means researchers can “draw meaningful and justifiable inferences from scores about a sample or population” (Creswell, 2005, p.600). Validity refers to how well a survey was measured against what it was intended to measure. It has two broad types: internal and external (Roberts et al., 2006). Roberts et al. expressed that external validity applies to confidence in the findings when the survey is applied to other people or situations, while internal validity addresses study outcomes and the reasons for those outcomes.

Reliability refers to the degree to which the same study, conducted multiple times and under the same conditions, produces the same results, i.e., consistent results (Cooper & Schindler, 2006; Zach, 2006).

Factors such as ambiguous or unclear survey questions and techniques that vary when surveys are administered affect reliability (Creswell, 2005). Therefore, field tests were used to increase survey validity and reliability.

4.6.2 Ethics Approval

For this research study, no ethical issues were encountered. Additionally, no individual-specific identifiable information was collected, and participation in the study was voluntary. No research was undertaken until permission for the study had been confirmed by the School of Architecture and Built Environment ethics committee. The researcher made provisions to ensure privacy for the respondents by collecting questionnaire responses. This complied with Wolverhampton University confidentiality, privacy, and anonymity guidelines that required researchers to make adequate provisions to ensure that participant's identities were not revealed in any portion of the research or results. The disk will be destroyed and complete confidentiality is assured.

4.6.3 Analysis of quantitative data

Data analysis through descriptive statistics and inferential statistics was done. Quantitative research requires specific data that can be retrieved at all times, and qualitative research allows for change. The quantitative data collected for the study were analysed using both descriptive and inferential statistics.

4.7 Part B - Qualitative Data Collection and Analysis

Interviews were used to check elements of the results from the quantitative phase of research. A focus group forum was used to tease out the opinions of the participants on the results of the quantitative study. Also, the participants were asked to proffer suggestions on how leadership can be more effective. The set of questions used are attached in Appendix (B). Details of the focus group are discussed in Chapter 6.

This is about issues arising from part A. Some participants answer Agree, some answer Neutral and some answer Disagree. This part tries to find why some participants choose these answers.

4.7.1 Data Analysis

The qualitative data were analysed by means of interpretation and information gained from desired participants (Cooper & Schindler, 2006). The data collected were analysed by using the technique of content analysis. In this technique, different meanings of the responses were explored (Cassell & Symon, 2004). The objective of content analysis is to provide common elements from the responses of participants to identify themes and emerging issues. This provides a means to generalize the responses appropriate for the questions posed for the study. SPSS was used to get different charts and mean values.

4.9 Summary of Chapter 4

This chapter provided a detailed description of types of research, information on the sample, instrumentation, measures, data collection, data analysis and response rate for the study. This chapter also includes a discussion on the validity and reliability and ethical considerations of the study. The results of the study are presented in the forthcoming chapters 5 and 6.

CHAPTER FIVE

Results of Quantitative Analysis

5.1 Introduction

This chapter contains discussion of the results of the data collections. This analysis is based on the survey and discussions made during the field study. The chapter highlights the research findings, which are categorised into main groups; leadership style, attributes and the relationship between demographic information, and the impact of culture on construction project success. These explorations will help leaders in determining an effective leadership style and assist project leaders in formulating their personnel strategies for construction project success.

5.2 Summary of Demographic Information of Sample

The total number of sample respondents was 90 construction practitioners in UAE. The demographic breakdown among the 90 respondents is summarized in Table 5.1, which shows that the majority of the 90 respondents (75; 83.3%) were male construction practitioners in UAE. For the age of the respondents, almost half (41; 45.6%) were aged between 31 and 40 years old. There were 22 (24.4%) that were aged between 41 and 51 years old and another 19 (21.1%) that were aged between 20 and 30 years old. For the education level, more than half (53; 58.9%) among the 90 respondents have a Bachelors degree, while there were 30 (33.3%) with a Master's degree. The length of construction experience in UAE among the construction practitioners varied between three and five years (13; 14.4%), six and 10 years (29; 32.2%), 10 and 14 years (19; 21.1%), and more than 15 years (21; 23.3%). For the nationality of the respondents, the 90 respondents were almost equally divided among UAE nationals (43; 47.8%) and other Arab nationals (39; 43.3%). The majority of the 90 respondents spoke Arabic language (82; 91.1%). In terms of job cadre of the 90 construction practitioners, many were line managers (33; 36.7%) or middle management (37; 41.1%). There were only nine (10%) in top management. For the job title, almost half were project managers (37; 41.1%) while there were also 14 (15.6%) project engineers. Thirty-two (35.6%) of the 90 respondents provide leadership in construction to one to five people, 23 (25.6%) respondents provide leadership to over 20 people, 15 (16.7%) provide leadership to six to 10 people, and 11 (12.2%) respondents provide leadership to no one. In terms of the duration of leadership in construction, the length was varied from zero to two years

(26; 28.9%), three to five years (25; 27.8%), six to 14 years (19; 21.1%), and more than 15 years (18; 20%). For the leadership success rating among the 90 construction practitioners in UAE, many rated their leadership as good (60; 66.7%).

Table 5.1 Demographic Characteristics of Respondents (N = 90)

Rating of Demographic Characteristics	Frequency	Per cent
1-Sex		
Male	75	83.3
Female	15	16.7
2-Age		
Between 20 and 30 years	19	21.1
Between 31 and 40 years	41	45.6
Between 41 and 51 years	22	24.4
Above 51 years	8	8.9
3-Education Level		
Undergraduate	4	4.4
Bachelor	53	58.9
Master's	30	33.3
PhD	2	2.2
Missing	1	1.1
4-Length of Construction Experience in UAE		
Between 0 and 2 years	7	7.8
Between 3 and 5 years	13	14.4
Between 6 and 10 years	29	32.2
Between 10 and 14 Years	19	21.1
More than 15 years	21	23.3
Missing	1	1.1

5-Nationality

UAE	43	47.8
Other Arab	39	43.3
Non-Arab	8	8.9

6-Spoken Language

Arabic	82	91.1
English	7	7.8
Others	1	1.1

7-Job Cadre

Line Manager	33	36.7
Middle Management	37	41.1
Top Management	9	10
Missing	11	12.2

8-Job Title

Project Manager	37	41.1
Project Engineer	14	15.6
Design Manager	8	8.9
Cost Control Manager	2	2.2
Quality Manager	1	1.1
Others	23	25.6
Missing	5	5.6

9-In Construction you Provide Leadership to

No One	11	12.2
1 - 5 People	32	35.6
6 - 10 People	15	16.7
11 - 20 People	7	7.8

Over 20 People	23	25.6
Missing	2	2.2
10- In construction you have been a leader for		
0 - 2 years	26	28.9
3 - 5 years	25	27.8
6 - 14 years	19	21.1
More than 15 years	18	20
Missing	2	2.2
11-Please rate your leadership, where applicable		
Not Sure	4	4.4
Adequate	10	11.1
Good	60	66.7
Excellent	13	14.4
Missing	3	3.3

5.3 Analysis of Leadership Styles of Construction Practitioners in UAE

The descriptive statistics of the responses on the leadership styles in part 2 of the questionnaire were obtained from the 90 construction practitioners in UAE. Frequency and percentage breakdown of the responses on each statements pertaining to the six leaderships will be conducted to determine whether the 90 construction practitioners in UAE agreed or disagreed with the statements in the survey items. This will summarize the survey results of Part 2 of the survey questionnaire. Prior to the frequency and percentage breakdown, the responses of the “strongly agree” and “agree” scales were merged as a single category of “agreement” while the responses of “strongly disagree” and “disagree” scales were merged as a single category of “disagreement”. Making the responses in this way will make it easier to analyze if the proportion of agreement is statistically different from the proportion of disagreement.

5.3.1 Leadership Style 1: (Autocratic or Authoritarian)

The breakdown of responses on the statements for leadership style 1 is summarized in Table 5.2. The statistics showed that most of the 90 respondents agreed with the statement of “I like to have clear structure and fixed targets” (80; 88.9%). This result showed that the majority of the 90 construction practitioners in UAE have this attribute of leadership style 1. There were slightly more respondents that agreed (36; 40%) with the statement of “When workers are not performing well, they must be punished” as compared to those that disagreed (27; 30%). This result showed that many among the 90 construction practitioners in UAE have this leadership style. In addition, there was no consensus on the percentage of the responses among the participants on the leadership style 1 statements of “I like to keep total control and authority with me”, “I like to make project-related decisions myself”, and “Concerning projects, I like to keep total control and responsibility with me” since there were equal percentages of responses of agreement and disagreement among the 90 construction practitioners in UAE. Lastly, half of the 90 respondents disagreed with the statement, “I and my staff have sufficient skill to execute the project; no need of further training” (45; 50%), indicating that many among the 90 construction practitioners in UAE did not exhibit this attribute of leadership style 1.

Table 5.2 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2A Leadership Style 1 of Construction Practitioners in UAE

	Leadership style 1(Autocratic / Authoritarian)	Agreement	Neutral	Disagree-ment	Missing
1	I like to keep total control and authority with me	30 33.4%	27 30%	33 36.7%	
2	I like to make project-related decisions myself	28 31.1%	32 35.6%	30 33.3%	
3	Concerning projects, I like to keep total control and responsibility with me	38 42.3%	15 16.7%	37 41.1%	
4	I like to have clear structure and fixed targets	80 88.9%	8 8.9%	2 2.2%	

5	I and my staff have sufficient skill to execute the project; no need of further training	21 23.3%	24 26.7%	45 50%	
6	When workers are not performing well, they must be punished	36 40%	26 28.9%	27 30%	1 1.1%

5.3.2 Leadership Style 2: (Bureaucratic)

The breakdown of responses on the statements for leadership style 2 are summarized in Table 5.3. The statistics showed that most of the 90 respondents agreed with the statements for leadership style 2 of “I like rules and regulations to be followed strictly” (78; 86.7%), “I like to have full authority related to my position on the project” (83; 92.2%), “I focus on control and consistent output” (77; 85.6%), “Following the rules and regulations is one of my priorities” (79; 87.7%), and “I will reward workers based on their ability to follow the rules” (61; 67.8%). This result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 2.

Table 5.3 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2B Leadership Style 2 of Construction Practitioners in UAE

	Leadership Style 2 (Bureaucratic)	Agreement	Neutral	Disagree- ment	Missing
1	I like rules and regulations to be followed strictly	78 86.7%	11 12.2%	1 1.1%	
2	I like to have full authority related to my position on the project	83 92.2%	5 5.6%	2 2.2%	
3	I focus on control and consistent output	77 85.6%	9 10%	4 4.4%	
4	Following the rules and regulations is one of my priorities	79 87.7%	8 8.9%	3 3.3%	
5	I will reward workers based on their ability to follow the rules	61 67.8%	22 24.4%	5 5.6%	2 2.2%

5.3.3 Leadership Style 3: (Democratic or Participative)

The breakdown of responses on the statements for leadership style 3 are summarized in Table 5.4. The statistics showed that most of the 90 respondents agreed to the statements for leadership style 3, of “I like to share the decision-making responsibility with my team members” (79; 87.8%), “I like to have feedback from all team members on decisions made” (79; 87.7%), “The development of my team members is one of my priorities” (85; 94.4%), and “I like to share credit or incentive with all team members” (80; 88.9%). This result showed that the majority of the 90 construction practitioners in UAE exhibited these attributes of leadership style 3. On the other hand, there were slightly more respondents that agreed to the statements of “I like to share decision-making and responsibility with only my creative team members” (40; 44.4%) and “I focus on authority and limited control” (39; 43.3%) as compared to those that disagreed.

Table 5.4 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2C Leadership Style 3 of Construction Practitioners in UAE

	Leadership Style 3 (Democratic or Participative)	Agreement	Neutral	Disagree-ment	Missing
1	I like to share the decision-making responsibility with my team members	79 87.8%	8 8.9%	9 3.3%	
2	I like to share decision-making and responsibility with only my creative team members	40 44.4%	25 27.8%	24 26.6%	1 1.1%
3	I focus on authority and limited control	39 43.3%	27 30%	24 26.7%	
4	I like to have feedback from all team members on decisions made	79 87.8%	9 10%	2 2.2%	
5	The development of my team members is one of my priorities	85 94.4%	4 4.4%	1 1.1%	
6	I like to share credit or incentive with all team members	80 88.9%	9 10%	1 1.1%	

5.3.4 Leadership Style 4: (Charismatic)

The breakdown of responses on the statements for leadership style 4 are summarized in Table 5.5. The statistics showed that most of the 90 respondents agreed with the statements for leadership style 4 of “I have special qualities to inspire team members” (65; 72.2%), “I like to promote vision and mission of the organization throughout the project” (74; 82.2%), “I like to develop a personal relationship with members of project team” (65; 72.2%), “I like to develop the skills of each member of the project team” (86; 95.6%), and “I keenly address the cares and needs of team members” (82; 91.1%). This result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 4.

Table 5.5 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2D Leadership Style 4 of Construction Practitioners in UAE

	Leadership Style 4 (Charismatic)	Agreement	Neutral	Disagree- ment	Missing
1	I have special qualities to inspire team members	65 72.2%	22 24.4%	2 2.2%	1 1.1%
2	I like to promote vision and mission of the organization throughout the project	74 82.2%	14 15.6%	1 1.1%	1 1.1%
3	I like to develop a personal relationship with members of project team	65 72.2%	16 17.8%	8 8.9%	1 1.1%
4	I like to develop the skills of each member of the project team	86 95.6%	2 2.2%	1 1.1%	1 1.1%
5	I keenly address the cares and needs of team members	82 91.1%	6 6.7%	1 1.1%	1 1.1%

5.3.5 Leadership Style 5: (Laissez-faire [Delegative])

The breakdown of responses on the statements for leadership style 5 are summarized in Table 5.6. The statistics showed that most of the 90 respondents agreed with the statements for leadership style 5 of “I delegate authority to talented, capable and

entrusted team members” (69; 76.6%), “I like to delegate tasks to talented and entrusted employees” (70; 77.7%), “I focus on trust and confidence-building among team members” (80; 88.9%), “I like to manage people who manage the job” (74; 82.3%), “I like to reward team members according to their performance” (83; 92.2%), and “I like to reward team members according to the results they are achieving” (82; 91.1%). This result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 5.

Table 5.6 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2E Leadership Style 5 of Construction Practitioners in UAE

	Leadership Style 5 (Laissez-faire [Delegative])	Agreement	Neutral	Disagree-ment	Missing
1	I delegate authority to talented, capable and entrusted team members	69 76.6%	18 20%	1 1.1%	2 2.2%
2	I like to delegate tasks to talented and entrusted employees	70 77.7%	15 16.7%	4 4.4%	1 1.1%
3	I focus on trust and confidence-building among team members	80 88.9%	8 8.9%	2 2.2%	
4	I like to manage people who manage the job	74 82.3%	14 15.6%	2 2.2%	
5	I like to reward team members according to their performance	83 92.2%	5 5.6%	1 1.1%	1 1.1%
6	I like to reward team members according to the results they are achieving	82 91.1%	6 6.7%	1 1.1%	1 1.1%

5.3.6 Leadership Style 6: (Paternalistic)

The breakdown of responses on the statements for leadership style 6 are summarized in Table 5.7. The statistics showed that most of the 90 respondents agreed with the statement of “I focus on regulating conduct of team members towards me” (55; 61.1%), “I focus on regulating the conduct of team members towards each other” (64; 71.1%), “I like to consult my team members before making decisions” (79; 87.8%), “I

like to use power to protect and reward subordinates” (52; 57.8%), and “I am interested in knowing how my workers feel” (68; 75.6%). These results showed that the majority of the 90 construction practitioners in UAE exhibited these attributes of leadership style 6. There were slightly more respondents who agreed with the statement, “I consider my team members as my children” (43; 47.8%) and “I like to act as father of all my employees” (41; 45.6%) as compared to those that disagreed. This result showed that many among the 90 construction practitioners in UAE exhibited these attributes of leadership style 6. Lastly, there were more respondents that disagreed with the statement of “I like to use power to control and punish subordinates” (35; 38.9%) as compared to those that agreed, indicating that many among the 90 construction practitioners in UAE did not exhibit this attribute of leadership style 6.

Table 5.7 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 2F Leadership Style 6 of Construction Practitioners in UAE

	Leadership Style 6 (Paternalistic)	Agreement	Neutral	Disagree- ment	Missing
1	I consider my team members as my children	43 47.8%	27 30%	20 22.2%	
2	I like to act as father of all my employees	41 45.6%	31 34.4%	18 20%	
3	I focus on regulating conduct of team members towards me	55 61.1%	32 35.6%	2 2.2%	1 1.1%
4	I focus on regulating the conduct of team members towards each other	64 71.1%	21 23.3%	5 5.6%	
5	I like to consult my team members before making decisions	79 87.8%	10 11.1%	1 1.1%	
6	I like to use power to control and punish subordinates	24 26.6%	31 34.4%	35 38.9%	
7	I like to use power to protect and reward subordinates	52 57.8%	20 22.2%	18 20%	
8	I am interested in knowing how my workers feel	68 75.6%	19 21.1%	3 3.3%	

5.3.7 Comparison of Leadership Styles

The breakdown of responses on the statements for leadership styles used in Abu Dhabi is summarized in Table 5.8. The statistics showed that most of the 90 respondents agreed that leadership styles (bureaucratic, charismatic and laissez-faire [delegative])

Table 5.8 Leadership used /suitable for Abu Dhabi

No	Leadership Style	%
1	Leadership Style 1: (Autocratic or Authoritarian)	Indicating that many among the 90 construction practitioners in UAE did not exhibit this attribute of leadership style 1.
2	Leadership Style 2 (Bureaucratic)	The result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 2.
3	Leadership Style 3: (Democratic or Participative)	The result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 3
4	Leadership Style 4 (Charismatic)	This result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 4.
5	Leadership Style 5: (Laissez-faire [Delegative])	This result showed that the majority of the 90 construction practitioners in UAE exhibited all the attributes of leadership style 5.

6	Leadership Style 6: (Paternalistic)	This result showed that many among the 90 construction practitioners in UAE did not exhibit this attribute of leadership style 6.
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5.4 Attributes of Leadership

Table 5.9 summarizes the different leadership attributes from part 3 of the questionnaire, among the 90 construction practitioners in UAE. It can be seen that there were many more visionary (47; 52.2%) than rational (31; 34.4%). More than half were creative (62; 68.9%) rather than persistent (15; 16.7%). There were almost equal percentages between analytical (38; 42.2%) and innovative (37; 41.1%) attributes among the 90 construction practitioners in UAE. Almost half of the 90 construction practitioners in the UAE were independent (44; 48.9%) rather than a stabilizer (27; 30%). There were slightly more imaginary leaders (39; 43.3%) than deliberative leaders (30; 33.3%). There were almost equal percentages between structured leaders (37; 41.1%) and courageous leaders (34; 37.8%). There were slightly more passionate leaders (40; 44.4%) than businesslike leaders (27; 30%). Almost half of the 90 construction practitioners in the UAE were warm and radiant (41; 45.6%) rather than cold and reserved (10; 11.1%). Also, almost half of the 90 construction practitioners in the UAE express humility (42; 46.7%) rather than rarely admitting being wrong (5; 5.6%). The majority of the 90 construction practitioners in the UAE share knowledge (71; 78.9%) rather than centralizing information (7; 7.8%). More than half were inspiring (47; 52.2%) rather than tough-minded (8; 8.9%). Majority of the 90 construction practitioners in the UAE are trusting (68; 75.6%) rather than guarded (17; 18.9%). Lastly, more than half act as a coach or consultant (51; 56.7%) rather than acting as a boss (11; 12.2%)

Table 5.9 Frequency and Percentage Breakdown of Responses on Questionnaire on Part 3 Leadership Attributes of Construction Practitioners in UAE

Rating of Leadership Attributes of Construction Practitioners in UAE	Frequency	Per cent
I like to be		
Rational	31	34.4
Visionary	47	52.2

Missing	12	13.3
I like to be		
Persistent	15	16.7
Creative	62	68.9
Missing	13	14.4
I like to be		
Analytical	38	42.2
Innovative	37	41.1
Missing	15	16.7
I like to be		
Stabilizer	27	30
Independent	44	48.9
Missing	19	21.1
I like to be		
Deliberative	30	33.3
Imaginary	39	43.3
Missing	21	23.3
I like to be		
Structured	37	41.1
Courageous	34	37.8
Missing	19	21.1
I like to be		
Businesslike	27	30
Passionate	40	44.4
Missing	23	25.6
I like to be		
Cold and reserved	10	11.1
Warm and radiant	41	45.6
Missing	39	43.3

I like to		
Rarely admit being wrong	5	5.6
Express humility	42	46.7
Missing	43	47.8
I like to be		
Centralized information	7	7.8
Share knowledge	71	78.9
Missing	12	13.3
I like to be		
Tough-minded	8	8.9
Inspiring	47	52.2
Missing	35	38.9
I like to be		
Guarded	5	5.6
Trusting	68	75.6
Missing	17	18.9
I like to		
Act as a boss	11	12.2
Act as coach or consultant	51	56.7
Missing	28	31.1

5.4.1 Characteristics of the respondents: Leaders versus Managers

Table 5.10 summarizes whether the project managers in Abu Dhabi are leaders or managers. Among the 90 construction practitioners in UAE that participated, most of them possess leader attributes more than manager attributes. For example, among all participants, 47 participants chose a leader attribute, visionary; and 31 participants chose rational, which is a manager attribute. Similarly, 44 participants chose independent, a leader attribute, and 27 chose stabilizer, which is a manager attribute.

Table 5.10 Whether project managers in Abu Dhabi are leaders or managers

No	Leadership Attributes	Manager	Leader	Missing
1	Rational vs Visionary	31	47	12
2	Persistent vs Creative	15	62	13
3	Analytical vs Innovative	38	37	15
4	Stabilizer vs Independent	27	44	19
5	Deliberative vs Imaginary	30	39	21
6	Structured vs Courageous	37	34	19
7	Businesslike vs Passionate	27	40	23
8	Cold and reserved vs Warm and radiant	10	41	39
9	Rarely admit being wrong vs Express humility	5	42	43
10	Centralized information vs Share Knowledge	7	71	12
11	Tough Minded vs Inspiring	8	47	35
12	Guarded vs Trusting	5	68	17
13	Act as a boss vs Act as coach or consultant	11	51	28

5.5 Relationship Between Demographic Information and Leadership Styles of Construction Practitioners in UAE

A Pearson chi-square test was conducted to determine whether there were any relationships between the different leadership types and demographic information. The demographic information includes sex, age, education level, length of construction experience in UAE, nationality, job title, job cadre, and spoken language. A Pearson chi-square test was conducted since the variables were categorically measured, and to compare the responses on each statement for the leadership styles against each of the categories of the demographic information. The significance of the statistics means that the responses were different in each category of the demographic information, implying there is a significant relationship. A level of significance of 0.05 was used in the statistical analysis. The results are presented in Table 5.11. Only those significant results are presented.

For the demographic information on sex, the results of the chi-square test showed that sex is significantly related to the leadership style 1 statement of “I like to have clear structure and fixed targets” ($X^2(4, 90) = 11.98, p = 0.02$) and leadership style 5 statement of “I delegate authority to talented, capable and entrusted team members” ($X^2(3, 90) = 9.87, p = 0.02$).

For the demographic information on age, the results of the chi-square test showed that age is significantly related to the leadership style 2 statements of “I like rules and regulations to be followed strictly” ($X^2(9, 90) = 19.41, p = 0.02$), “Following the rules and regulations is one of my priorities” ($X^2(9, 90) = 17.40, p = 0.04$), and “I will reward workers based on their ability to follow the rules” ($X^2(9, 90) = 24.88, p < 0.001$); leadership style 4 statements of “I like to promote vision and mission of the organization throughout the project” ($X^2(9, 90) = 18.75, p = 0.03$) and “I like to develop a personal relationship with members of project team” ($X^2(9, 90) = 18.31, p = 0.03$); leadership style 6 statement of “I like to use power to control and punish subordinates” ($X^2(12, 90) = 28.83, p < 0.001$); and the attributes of “being tough-minded or inspiring” ($X^2(3, 90) = 13.84, p < 0.001$).

For the demographic information of education level, the results of the chi-square test showed that education level is significantly related to the leadership style 1 statement of “When workers are not performing well, they must be punished” ($X^2(12, 90) = 22.59, p = 0.03$), leadership style 5 statement of “I like to reward team members according to their performance” ($X^2(9, 90) = 25.34, p < 0.001$), and leadership style 6 statement “I like to consult my team members before making decision” ($X^2(9, 90) = 23.98, p < 0.001$).

For the demographic information on the length of construction experience in UAE, the results of the chi-square test showed that length of construction experience in UAE is significantly related to the leadership style 1 statements of “I like to have clear structure and fixed targets” ($X^2(16, 90) = 31.01, p = 0.01$) and “When workers are not performing well, they must be punished” ($X^2(16, 90) = 31.59, p = 0.01$); leadership style 2 statement of “I like to have full authority related to my position on the project” ($X^2(12, 90) = 22.14, p = 0.04$); leadership style 3 statements of “I like to share decision-making and responsibility with only my creative team members” ($X^2(16, 90) = 26.31, p = 0.05$); leadership style 4 statements of “I have special qualities to inspire team members” ($X^2(12, 90) = 22.39, p = 0.03$), “I like to promote vision and mission of the organization throughout the project” ($X^2(12, 90) = 23.37, p = 0.03$), and “I like to develop the skills of each member of the project team” ($X^2(12, 90) = 22.95, p = 0.03$); and the attributes of being “rational or visionary” ($X^2(4, 90) = 11.38, p = 0.02$) and being “analytical or innovative” ($X^2(4, 90) = 11.89, p = 0.02$).

For the demographic information on nationality, the results of the chi-square test showed that nationality is significantly related to the leadership style 2 statements of “I like rules and regulations to be followed strictly” ($X^2(6, 90) = 6.31, p = 0.01$), “I focus on control and consistent output” ($X^2(6, 90) = 19.60, p < 0.001$), “Following the rules and regulations is one of my priorities” ($X^2(6, 90) = 20.58, p < 0.001$), and “I will reward workers based on their ability to follow the rules” ($X^2(6, 90) = 14.04, p = 0.03$); leadership style 4 statement of “I have special qualities to inspire team members” ($X^2(6, 90) = 13.13, p = 0.04$); leadership style 6 statements of “I focus on regulating conduct of team members towards me” ($X^2(6, 90) = 1.64, p = 0.01$) and “I like to use power to protect and reward subordinates” ($X^2(8, 90) = 24.49, p < 0.001$); and the attributes of being “rational or visionary” ($X^2(2, 90) = 8.03, p = 0.02$), being “deliberative or imaginary” ($X^2(2, 90) = 7.11, p = 0.03$), being “businesslike or passionate” ($X^2(2, 90) = 9.66, p = 0.01$), being “cold and reserved or warm and radiant” ($X^2(2, 90) = 7.17, p = 0.03$), and being “tough-minded or inspiring” ($X^2(2, 90) = 9.03, p = 0.01$).

For the demographic information of job cadre, the results of the chi-square test showed that job cadre is significantly related to the leadership style 1 statement of “I like to have clear structure and fixed targets” ($X^2(8, 90) = 20.81, p = 0.01$); leadership style 2 statements of “I like rules and regulations to be followed strictly” ($X^2(6, 90) = 17.98, p = 0.01$) and “I will reward workers based on their ability to follow the rules” ($X^2(6, 90) = 14.38, p =$

0.03); leadership style 3 statement of “I like to share credit or incentive with all team members” ($X^2(4, 90) = 11.25, p = 0.02$); leadership style 4 statement of “I like to develop a personal relationship with members of project team” ($X^2(6, 90) = 12.67, p = 0.05$); leadership style 5 statements of “I focus on trust and confidence-building among team members” ($X^2(4, 90) = 10.17, p = 0.04$) and “I like to manage people who manage the job” ($X^2(4, 90) = 9.52, p = 0.05$); and leadership style 6 statement of “I consider my team members as my children” ($X^2(8, 90) = 17.67, p = 0.02$).

For the demographic information of job title, the results of the chi-square test showed that job title is significantly related to the leadership style 2 statements of “I like rules and regulations to be followed strictly” ($X^2(10, 90) = 22.54, p = 0.01$), “I focus on control and consistent output” ($X^2(15, 90) = 64.83, p < 0.001$), and “Following the rules and regulations is one of my priorities” ($X^2(15, 90) = 96.29, p < 0.001$); leadership style 3 statement of “I like to share decision-making and responsibility with only my creative team members” ($X^2(20, 90) = 33.49, p = 0.03$); leadership style 5 statements of “I delegate authority to talented, capable and entrusted team members” ($X^2(15, 90) = 86.85, p < 0.001$), “I like to delegate tasks to talented and entrusted employees” ($X^2(15, 90) = 33.23, p < 0.001$) and “I like to reward team members according to their performance” ($X^2(15, 90) = 27.24, p = 0.03$); and leadership style 6 statement of “I like to act as father of all my employees” ($X^2(15, 90) = 30.59, p = 0.01$).

For the demographic information of spoken language, the results of the chi-square test showed that spoken language is significantly related to the leadership style 2 statements of “I focus on control and consistent output” ($X^2(6, 90) = 27.61, p < 0.01$) and “Following the rules and regulations is one of my priorities” ($X^2(6, 90) = 33.82, p < 0.001$); and the attributes of being “tough-minded or inspiring” ($X^2(2, 90) = 6.90, p = 0.03$).

Table 5.11 Significant Pearson Chi-square Results of Relationship between Demographic Information and Leadership Styles

Demographic Information	Leadership Style	Statements	Value	df	Asymp. Sig. (2-sided)
Sex	1	I like to have clear structure and fixed targets	11.98	4	0.02
	5	I delegate authority to talented, capable and entrusted team members	9.87	3	0.02

Age	2	I like rules and regulations to be followed strictly	19.41	9	0.02
	2	Following the rules and regulations is one of my priorities	17.40	9	0.04
	2	I will reward workers based on their ability to follow the rules	24.88	9	0.00
	4	I like to promote vision and mission of the organization throughout the project	18.75	9	0.03
	4	I like to develop a personal relationship with members of project team	18.31	9	0.03
	6	I like to use power to control and punish subordinates	28.83	12	0.00
Education level	Part 3	I like to be tough-minded or inspiring	13.34	3	0.00
	1	When workers are not performing well, they must be punished	22.59	12	0.03
	5	I like to reward team members according to their performance	25.34	9	0.00
	6	I like to consult my team members before making decisions	23.98	9	0.00
Length of Construction Experience in UAE	1	I like to have clear structure and fixed targets	31.01	16	0.01
	1	When workers are not performing well, they must be punished	31.59	16	0.01
	2	I like to have full authority related to my position on the project	22.14	12	0.04
	3	I like to share decision-making and responsibility with only my creative team members	26.31	16	0.05
	4	I have special qualities to inspire team members	22.39	12	0.03
	4	I like to promote vision and mission of the organization throughout the project	23.37	12	0.03

Nationality	4	I like to develop the skills of each member of the project team	22.95	12	0.03
	Part 3	I like to be rational or visionary	11.38	4	0.02
	Part 3	I like to be analytical or innovative	11.89	4	0.02
	2	I like rules and regulations to be followed strictly	16.38	6	0.01
	2	I focus on control and consistent output	19.60	6	0.00
	2	Following the rules and regulations is one of my priorities	20.58	6	0.00
	2	I will reward workers based on their ability to follow the rules	14.04	6	0.03
	4	I have special qualities to inspire team members	13.13	6	0.04
	6	I focus on regulating conduct of team members towards me	16.64	6	0.01
	6	I like to use power to protect and reward subordinates	24.49	8	0.00
	Part 3	I like to be rational or visionary	8.03	2	0.02
	Part 3	I like to be deliberative or imaginary	7.11	2	0.03
	Part 3	I like to be businesslike or passionate	9.66	2	0.01
	Part 3	I like to be cold and reserved or warm and radiant	7.17	2	0.03
	Part 3	I like to be tough-minded or inspiring	9.03	2	0.01
Job Cadre	1	I like to have clear structure and fixed targets	20.81	8	0.01
	2	I like rules and regulations to be followed strictly	17.98	6	0.01
	2	I will reward workers based on their ability to follow the rules	14.38	6	0.03
	3	I like to share credit or incentive with all team members	11.25	4	0.02

Job Title	4	I like to develop a personal relationship with members of project team	12.67	6	0.05
	5	I focus on trust and confidence-building among team members	10.17	4	0.04
	5	I like to manage people who manage the job	9.52	4	0.05
	6	I consider my team members as my children	17.67	8	0.02
	2	I like rules and regulations to be followed strictly	22.54	10	0.01
	2	I focus on control and consistent output	64.83	15	0.00
	2	Following the rules and regulations is one of my priorities	96.29	15	0.00
	3	I like to share decision-making and responsibility with only my creative team members	33.49	20	0.03
	5	I delegate authority to talented, capable and entrusted team members	86.85	15	0.00
	5	I like to delegate tasks to talented and entrusted employees	33.23	15	0.00
Spoken Language	5	I like to reward team members according to their performance	27.24	15	0.03
	6	I like to act as father of all my employees	30.59	15	0.01
	2	I focus on control and consistent output	27.61	6	0.00
	2	Following the rules and regulations is one of my priorities	33.82	6	0.00
Part 3		I like to be tough-minded or inspiring	6.90	2	0.03

5.6 Interrater Reliability of the Questionnaire on Impact of Leadership on Construction Project Success in UAE

The responses in part 4 of the questionnaire which ask about the impact of leadership on construction project success in UAE by various construction practitioners in UAE were compared for interrater reliability. The intraclass correlation coefficient (ICC) of the responses among the 90 different construction practitioners in UAE was investigated to determine the strength of relationship of the scores within the different respondents and to determine if the scores are consistent across the different respondents. The statistical result ($f(81, 1296) = 2.29, p = 0.00$) had a significant p-value, less than the level of significance of 0.05, which implied that the responses among the 90 different construction practitioners in UAE in the questionnaire that asks about the impact of leadership on construction projects success in UAE were consistent or resembled each other. The intraclass correlation coefficient was calculated. The interrater reliability coefficient of the average measures of the 17 items has a value of 0.56. However, this showed that the responses in the 17-question items that asked about the impact of leadership on construction projects success did not have acceptable interrater reliability among the 99 respondents, since the value was less than the minimum acceptable value of 0.70. See Table 5.12.

Table 5.12 Interrater Reliability Measure of Responses on Part 4 of the Questionnaire

	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	0.07 ^a	0.04	0.12	2.29	81	1296	0.00
Average Measures	0.56 ^c	0.41	0.69	2.29	81	1296	0.00

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition – the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

5.7 Analysis of Impact of Leadership on Construction Project Success in UAE

The impact of leadership on construction project success in UAE was determined by analyzing the responses in part 4 of the survey questionnaire. Specifically, the analysis will seek whether group-leadership has an influence on project cost, time/delays, quality, project success, decision-making, etc. Frequency and percentage breakdown of the responses on the 17-item questionnaire will be conducted to determine whether the 90 construction practitioners in UAE agreed or disagreed with the statements in the survey items. Prior to the frequency and percentage breakdown, the responses of the “strongly agree” and “agree” scales were merged as a single category of “agreement”, while the responses of “strongly disagree” and “disagree” scales were merged as a single category of “disagreement”. Making the responses in this way will make it easier to analyze if the proportion of agreement is statistically different from the proportion of disagreement. The breakdowns of responses are summarized in Table 5.13.

The breakdown of the responses on the statements that asked about the impact of leadership on construction project success in UAE showed that most of the participants agreed with the statements of “The leadership styles used in the UAE influence the operations of project managers” (83.3%), “Project success in UAE construction is a direct function of the leadership style used” (83.3%), “I am familiar with the concept of group leadership in construction projects” (71.1%), “I am (or have been) involved with group leadership in construction projects” (72.2%), and “In the UAE; an inexperienced individual can jointly lead a project successfully alongside an experienced project manager” (50%). These results showed that the responses among the 90 construction practitioners in UAE viewed that the group leadership has an influence on the operations of project manager and project success in UAE. Also, it showed that most of the 90 construction practitioners in UAE were familiar with the concepts of group leadership in construction projects and were very involved with group leadership in the construction projects. In addition, there was no consensus on the responses among the participants on the influence of group leadership on project cost, time/delays, quality and decision-making, since there were equal responses of agreement and disagreement among the 90 construction practitioners in UAE.

Table 5.13 Frequency and Percentage Breakdown of Responses on Questionnaire on Impact of Leadership on Construction Project Success in UAE

	Rating of impact of Leadership on Construction Project Success in UAE	Agreement	Neutral	Disagree- ment	Missing
1	The leadership styles used in the UAE influence the operations of project managers	75 83.3%	14 15.6%	1 1.1%	
2	Project success in UAE construction is a direct function of the leadership style used	75 83.3%	11 12.2%	4 4.4%	
3	A project manager with (no) engineering background can equally be successful	13 14.4%	29 32.2%	47 52.2%	1 1.1%
4	I am familiar with the concept of group leadership in construction projects	64 71.1%	20 22.2%	5 5.6%	1 1.1%
5	I am (or have been) involved with group leadership in construction projects	65 72.2%	18 20%	5 5.6%	2 2.2%
6	The concept of joint leadership is well understood in the UAE construction sector	30 33.3%	39 43.3%	20 22.2%	1 1.1%
7	In the UAE, an inexperienced individual can jointly lead a project successfully alongside an experienced	45 50%	27 30%	18 20%	
8	Construction workers in the UAE do not like the concept of joint leadership of projects	26 28.9%	41 45.6%	21 23.3%	2 2.2%
9	Construction contractors in the UAE do not like the concept of joint leadership of projects	28 31.1%	37 41.1%	25 27.8%	
10	Suppliers to UAE construction projects do not like the concept of joint project leadership	25 27.8%	41 45.6%	23 25.6%	1 1.1%
11	Project managers do not like the concept of joint leadership in UAE construction projects	24 26.7%	38 42.2%	28 31.1%	
12	Joint leadership in UAE construction leads to lengthy decision-making processes	42 46.7%	31 34.4%	17 18.9%	

13	The concept of joint-project managers in UAE construction leads to more project delays	29 32.2%	29 32.2%	32 35.6%	
14	The concept of joint-project managers in UAE construction leads to greater project success	41 45.6%	39 43.3%	9 10%	1 1.1%
15	The concept of joint-project managers in UAE construction adds more to project overhead costs	32 35.6%	40 44.4%	18 20%	
16	The concept of joint-project managers in UAE construction is unnecessary	15 16.7%	43 47.8%	32 35.6%	
17	The concept of joint-project managers is unique to UAE construction	23 25.6%	46 51.1%	20 22.2%	1 1.1%

5.7.1 Interrater Reliability of the Questionnaire on Impact of Culture on Construction Project Success in UAE

The responses in part 5 of the questionnaire which asks about the impact of culture on construction projects success in UAE by various construction practitioners in UAE were compared for interrater reliability. The intraclass correlation coefficient (ICC) of the responses among the 90 different construction practitioners in UAE was investigated to determine the strength of relationship of the scores within the different respondents and to determine if the scores are consistent across the different respondents. The statistical result ($f(82, 1394) = 5.39, p = 0.00$) had a significant p-value, less than the level of significance of 0.05, which implied that the responses among the 90 different construction practitioners in UAE in the questionnaire that asks about the impact of culture on construction projects success in UAE were consistent with or resembled each other. The interrater reliability coefficient of the average measures of the 18 items has a value of 0.82. This showed that the responses in the 18-question items that asked about the impact of culture on construction projects success have more than acceptable interrater reliability among the 90 respondents, since the value exceeded the minimum acceptable value of 0.70. This means that the responses among the 90 construction practitioners in the UAE were more or less similar. See Table 5.14.

Table 5.14 Interrater Reliability Measure of Responses on Part 5 of the Questionnaire

	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	0.20 ^a	0.14	0.27	5.39	82	1394	0.00
Average Measures	0.82 ^c	0.75	0.87	5.39	82	1394	0.00

Two-way mixed effects model where people effects are random and measures effects are fixed.

- a. The estimator is the same, whether the interaction effect is present or not.
- b. Type C intraclass correlation coefficients using a consistency definition – the between-measure variance is excluded from the denominator variance.
- c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

5.7.2 Result of Impact Leadership on Project Outcomes

The result from Table 5.13 shows responses of 90 construction practitioners in the UAE. The result indicates that among the 90 project managers who participated in the survey, more than 80% viewed group leadership as having an influence on the operations of project managers and project success in UAE. The results also indicated that most construction practitioners in UAE are familiar with the concepts of group leadership in construction projects and were very involved with group leadership in construction projects. It also showed that almost all of the construction practitioners in the UAE considered that joint leadership leads to a lengthy decision-making process but greater project success. Additionally, from among the participant responses of the 90 construction practitioners in UAE there was no consensus on the influence of joint project managers on project overhead costs and delays, given that there were equal responses of agreement and disagreement among them.

5.8 Analysis of Impact of Culture on Construction Project Success in UAE

The impact of culture on construction project success in UAE was determined by analyzing the responses on part 5 of the survey questionnaire. Specifically, the analysis will seek whether the culture of the contractors has an influence on project cost, time/delays, quality, project success, decision-making, etc. Frequency and percentage breakdown of the responses on the 18-item questionnaire will be conducted to determine whether the 90 construction practitioners in UAE agreed or disagreed with the statements in the survey items. Prior to the frequency and percentage breakdown, the responses of “strongly agree” and “agree” scales were also merged as a single category of “agreement”, while the responses of “strongly disagree” and “disagree” scales were also merged as a single category of “disagreement”. The breakdowns of responses are summarized in Table 5.15.

The breakdown of the responses on the statements that asked about the impact of leadership on construction project success in UAE showed that most of the participants agreed with the statements of “I am fully familiar with the UAE culture” (88.9%), “Culture has a significant impact on the types of leaders in UAE construction” (85.6%), “The UAE culture has a significant impact on the adoption of leadership style in construction” (75.6%), “The UAE culture influences construction operations on site” (58.9%), “The UAE culture influences the duration of construction projects” (57.8%), “The UAE culture influences the price of construction projects” (64.4%), “The UAE culture influences the quality of construction projects” (64.4%), “The UAE culture influences the design of construction buildings and other facilities” (80%), “The UAE culture influences the way project teams relate with each other” (61.1%), “The UAE culture influences how contractors relate with other stakeholders” (58.9%), “The UAE culture influences the way construction disputes or issues are resolved” (58.9%), “The UAE culture influences the conditions of contract used on construction projects” (51.1%), “The UAE culture influences the overall project management of construction projects” (52.2%), “The UAE culture influences the use of team leadership in construction projects” (56.7%), and “A project manager with no engineering background is likely to face more challenges” (84.4%). These results showed that the responses among the 90 construction practitioners in UAE viewed that the culture has an influence on the leadership in UAE construction, on-site construction operations, duration of the project (time/delays), price of projects (project cost), quality, design of construction projects, relationship between project teams, relationships between contractors and stakeholders, resolving disputes or issues in the

project, conditions of the project contracts, overall project management. Also, it showed that most of the 90 construction practitioners in UAE were familiar with the UAE culture. In addition, there was no consensus of the responses among the participants on the influence of culture on dispute in the projects and if it creates barriers to project success among the 90 construction practitioners in UAE.

Table 5.15 Frequency and Percentage Breakdown of Responses to the Questionnaire on Impact of Culture on Construction Project Success in UAE

	Rating of impact of Culture on Construction Project Success in UAE	Agreement	Neutral	Disagree- ment	Missing
1	I am fully familiar with the UAE culture	80 88.9%	9 10%	1 1.1%	
2	Culture has a significant impact on the types of leaders in UAE construction	77 85.6%	11 12.2%	2 2.2%	
3	The UAE culture has a significant impact on the adoption of leadership style in construction.	68 75.6%	16 17.8%	5 5.6%	1 1.1%
4	The UAE culture influences construction operations on site	53 58.9%	31 34.4%	6 6.7%	
5	The UAE culture influences the duration of construction projects	52 57.8%	29 32.2%	9 10%	
6	The UAE culture influences the price of construction projects	58 64.4%	21 23.3%	11 12.2%	
7	The UAE culture influences the quality of construction projects	58 64.4%	22 24.4%	10 11.1%	
8	The UAE culture influences the design of construction buildings and other facilities	72 80%	12 13.3%	4 4.4%	2 2.2%
9	The UAE culture influences the way project teams relate with each other	55 61.1%	30 33.3%	5 5.6%	
10	The UAE culture influences how contractors relate with other stakeholders	53 58.9%	28 31.1%	8 8.9%	1 1.1%

11	The UAE culture contributes to more disputes in construction projects	24 26.7%	36 40%	28 31.1%	2 2.2%
12	The UAE culture contributes to lesser dispute in construction projects	38 58.9%	43 47.8%	9 10%	
13	The UAE culture influences the way construction disputes or issues are resolved	53 58.9%	29 32.2%	8 8.9%	
14	The UAE culture influences the conditions of contract used on construction projects	46 51.1%	36 40%	8 8.9%	
15	The UAE culture influences the overall project management of construction projects	47 52.2%	36 40%	5 5.6%	2 2.2%
16	The UAE culture influences the use of team leadership in construction projects	51 56.7%	25 27.8%	14 15.6%	
17	The UAE culture is a barrier to project success in UAE construction	26 28.9%	25 27.8%	39 43.3%	
18	A project manager with no engineering background is likely to face more challenges	76 84.4%	7 7.8%	6 6.7%	1 1.1%

5.8.1 Results of Multiple Linear Regressions for Influence of Demographic Variables on Respondents' Responses about Their Agreement to the Impact of Culture on Construction Project Success in UAE

A multiple linear regression model was conducted to determine the extent of the influences of the demographic information of the respondents on the impact of leadership on construction project success in UAE. Specifically, the regression analysis will determine the impact of each demographic variable on the respondent's agreement to whether construction contractors in UAE do not like the concept of joint leadership of projects. The demographic variables of respondents include gender, respondent's age, education level, length of construction experience in UAE, nationality, spoken language, job cadre, job title, number of people they provided leadership for in construction, duration of leadership in construction, and leadership success rating. A

level of significance of 0.05 was used in the regression analysis. The results are presented in Table 5.16.

First, the model fit in terms of R^2 of the generated linear regression model was analyzed. The R^2 or the coefficient of determination is the indicator of how well the model fits the data in terms of the variance accounted for by the 11 demographic variables in the dependent variable of respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. R^2 is 1 minus the ratio of residual variability. R^2 closer to one is better, since this would mean that the independent variables are good predictors of the dependent variable. Looking at the R^2 value enumerated in Table 5.16, the regression model has a R^2 of 0.28. This value indicated that the independent variables of the 11 demographic variables accounted for 28% of the variance in the dependent variable, which is equivalent to a low effect size (Cohen, 1988).

Next, the significance of the regression model was analyzed. This statistical test examines the null hypothesis that there is no linear relationship between any of the 11 demographic variables as the independent variables to the dependent variable of respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. As shown in Table 5.16, the probability value computed from the F-test indicates that the regression involving the 11 demographic variables as the predictor variable of respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects was significant ($F(11,60) = 2.14; p = 0.03$) since the p-value was less than the level of significance of 0.05. Therefore, the assumption that there is a linear relationship between any of the 11 demographic variables and respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects was achieved.

Table 5.16 also summarized the linear regression equation estimates, including the intercept and the probability value of significance of the constant of the regression model and each of the 11 demographic variables as independent variables in the regression model for the dependent variable of respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. Based on the statistics in Table 5.16, it can be seen that only the constant of the regression model ($t(71) = 4.66, p < 0.001$), nationality ($t(71) = -2.90, p = 0.01$), and

the job title ($t(71) = -2.19, p = 0.03$) of the respondents were significant predictors and had a linear relationship to the respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. These pieces of demographic information were the only ones with p-values less than the level of significance value of 0.05. The other nine demographic variables of gender ($t(71) = 1.46, p = 0.15$), respondents' age ($t(71) = 1.37, p = 0.18$), education level ($t(71) = -1.44, p = 0.15$), length of construction experience in the UAE ($t(71) = -0.05, p = 0.96$), spoken language ($t(71) = 0.91, p = 0.37$), job cadre ($t(71) = -0.21, p = 0.83$), number of people they provided leadership for in construction ($t(71) = -0.31, p = 0.76$), duration of leadership in construction ($t(71) = 1.56, p = 0.12$), and leadership success rating ($t(71) = -0.98, p = 0.33$) did not have any significant impact to the respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects.

The standardized beta coefficient was analyzed to determine the independent contribution and the relative importance of the two demographic variables of nationality and job title, which have significant influence in predicting the dependent variable of respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. The standardized coefficient value (beta) of nationality was -0.73, which indicated that nationality has a negative contribution to the respondents' agreement to whether construction contractors in the UAE do not like the concept of joint leadership of projects. The agreement scales are coded as 1 and 2, while the disagreements scales are coded as 4 and 5, and the neutral scale is coded as 3. The negative beta value suggested that the respondents that have UAE nationality (coded as 1) disagreed as to whether construction contractors in the UAE do not like the concept of joint leadership of projects, while the respondents that were non-Arab (coded as 3) agreed as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. On the other hand, the standardized coefficient value (beta) of job title was also negative with a value of -2.19, which indicated that job title has a negative contribution to the respondents' agreement as to whether construction contractors in the UAE do not like the concept of joint leadership of projects. The negative beta value suggested that the respondents that have job title of project manager (coded as 1), project engineer (coded as 2), and design manager (coded as 3) disagreed as to whether construction contractors in the UAE do not like the concept of joint leadership of projects as compared to respondents that

were quality manager (coded as 6), HSE manager (coded as 5), and cost control manager (coded as 4), who agreed as to whether construction contractors in the UAE do not like the concept of joint leadership of projects.

Table 5.16 Multiple Linear Regression Results of Demographic Variables as Predictors of “Construction Contractors in the UAE Do Not Like the Concept of Joint Leadership of Projects”

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.84	0.82		4.66	0.00*
Gender	0.46	0.32	0.18	1.46	0.15
Age	0.28	0.20	0.28	1.37	0.18
Educational level	-0.27	0.19	-0.19	-1.44	0.15
Length of construction experience in the UAE	-0.01	0.12	-0.01	-0.05	0.96
Nationality	-0.94	0.32	-0.73	-2.90	0.01*
Spoken language	0.41	0.45	0.18	0.91	0.37
Job cadre	-0.04	0.18	-0.03	-0.21	0.83
Job title	-0.09	0.04	-0.26	-2.19	0.03*
Number of people they provided leadership for in construction	-0.03	0.10	-0.05	-0.31	0.76
Duration of leadership in construction	0.29	0.19	0.38	1.56	0.12
Leadership success rating	-0.15	0.15	-0.13	-0.98	0.33

NOTE: $R^2 = 0.28$, $F(11, 60) = 2.14$, $p = 0.03$, $N = 71$.

a Dependent Variable: Construction Contractors in the UAE do not like the concept of joint leadership of projects

b Predictors: (Constant), Please rate the success of your leadership; where applicable, Spoken language, Job title, Gender, Educational level, Job cadre, Length of construction experience in the UAE; Number of people they provided leadership for in construction, Age, Duration of leadership in construction; Nationality

Note: * Significant at $\alpha = .05$

Another multiple linear regression model was conducted to determine the extent of the influences of the demographic information of the respondents on the impact of joint project leadership impacts on the cost of construction projects in UAE. Specifically, the regression analysis will determine the impact of each demographic variable on the respondent's agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs. The demographic variables of respondents also include gender, respondent's age, education level, length of construction experience in UAE, nationality, spoken language, job cadre, job title, number of people they provided leadership for in construction, duration of leadership in construction, and leadership success rating. A level of significance of 0.05 was used in the regression analysis. The results are presented in Table 5.17.

First, the model fit in terms of R^2 of the generated linear regression model was analyzed. The R^2 value determined how well the model fits the data in terms of the variance accounted for by the 11 demographic variables in the dependent variable of respondents' agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs. Looking at the R^2 value enumerated in Table 5.17, the regression model has a R^2 of 0.14. This value indicated that the independent variables of the 11 demographic variables accounted for 14% of the variance in the dependent variable. The effect size of the demographic variables is very low.

Next, the significance of the regression model was analyzed. This statistical test examines the null hypothesis that there is no linear relationship between any of the 11 demographic variables as the independent variables to the dependent variable of respondents' agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs. As shown in Table 5.17, the probability value computed from the F-test indicates that the regression involving the 11 demographic variables as the predictor variable of respondents' agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs ($F(11,60) = 0.91$; $p = 0.51$) was insignificant, since the p-value was greater than the level of significance of 0.05. Therefore, there is no linear relationship between any of the 11 demographic variables to the respondents' agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs.

Table 5.17 summarizes the linear regression equation estimates, including the intercept and the probability value of significance of the constant of the regression model and each of the 11 demographic variables as independent variables in the regression model for the dependent variable of respondents' agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs. Based on the statistics in Table 5.17, it can be seen that only the constant of the regression model ($t(71) = 3.92, p < 0.001$) was significant in the regression model. None among the 11 demographic variables of gender ($t(71) = -0.35, p = 0.73$), respondent's age ($t(71) = -0.09, p = 0.93$), education level ($t(71) = 0.70, p = 0.49$), length of construction experience in the UAE ($t(71) = -1.59, p = 0.12$), nationality ($t(71) = 0.94, p = 0.35$), spoken language ($t(71) = -0.92, p = 0.36$), job cadre ($t(71) = -1.77, p = 0.08$), job title ($t(71) = -0.17, p = 0.87$), number of people they provided leadership for in construction ($t(71) = 1.33, p = 0.19$), duration of leadership in construction ($t(71) = -0.77, p = 0.45$), and leadership success rating ($t(71) = 0.20, p = 0.85$) did not have any significant impact on the respondent's agreement as to whether the concept of joint-project managers in UAE construction adds more to project overhead costs. Thus, none of the demographic information of the respondents has a connection to the respondents' responses on whether joint-project leadership has an impact on cost or not.

Table 5.17 Multiple Linear Regression Results of Demographic Variables as Predictors of "Concept of Joint-Project Managers in UAE Construction Adds More to Project Overhead Costs"

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.70	0.94		3.92	0.00*
Gender	-0.13	0.36	-0.05	-0.35	0.73
Age	-0.02	0.23	-0.02	-0.09	0.93
Educational level	0.15	0.22	0.10	0.70	0.49
Length of construction experience in the UAE	-0.22	0.14	-0.30	-1.59	0.12
Nationality	0.35	0.37	0.26	0.94	0.35

Spoken language	-0.47	0.51	-0.20	-0.92	0.36
Job cadre	-0.37	0.21	-0.28	-1.77	0.08
Job title	-0.01	0.05	-0.02	-0.17	0.87
Number of people they provided leadership for in construction	0.16	0.12	0.25	1.33	0.19
Duration of leadership in construction	-0.17	0.22	-0.20	-0.77	0.45
Leadership success rating	0.03	0.17	0.03	0.20	0.85

NOTE: $R^2 = 0.14$, $F(11, 60) = 0.91$, $p = 0.54$, $N = 71$.

a Dependent Variable: Concept of joint-project Managers in UAE construction adds more to project overhead costs

b Predictors: (Constant), Please rate the success of your leadership; where applicable, Spoken language, Job title, Gender, Educational level, Job cadre, Length of construction experience in the UAE, In a construction project; you provide leadership for, Age, you have been a leader in construction for, Nationality

Note: * Significant at $\alpha = .05$

5.8.2 Result of Impact of Culture on Project Outcomes

The result from Table 5.15 showed the responses of the 90 construction practitioners in UAE, who viewed that culture has a direct influence on leadership in UAE construction. The influence of culture was obvious from the responses of the participants in areas such as on site construction operations, duration of the project (time/delays), price of projects (project cost), quality, design of construction projects, relationship between project teams, relationships between contractors and stakeholders, resolving disputes or issues in the project, conditions of the project contracts, overall project management. In addition, it also showed that most of the 90 construction practitioners in UAE were familiar with UAE culture.

5.9 Qualitative Results on Major Cultural Challenges in Construction Projects in UAE and Benefits of UAE Culture to Construction Project Delivery

In this section, all responses to the semi-structured questions posed in the interview questions and focus group discussions were analyzed using the technique of content analysis. In this technique, different meanings of the responses were explored (Cassell & Symon, 2004). The objective of the content analysis is to provide common elements from the responses of participants to identify themes and emerging issues. This provided a means to generalize the responses appropriate for the interview questions posed for the study.

Question 18 asked about the major challenges that joint-project managers face in UAE. Table 5.18 summarized the challenges the participants of the study enumerated. Two of the topmost challenges include the control of management and the leadership associated with joint-project management. The participants also noted that joint management caused project coordination management.

Table 5.18 Major challenges joint-project managers face in UAE.

Elements (<i>n</i> =61)	# of participants to offer this experience	% of participants to offer this experience
Management Control	12	20%
Leadership	12	20%
Coordination Management	11	20%
Project Timeline	9	15%
Project Staff Accountability	8	13%
Misunderstanding of Policies/Guidelines	3	5%
Project Goal Setting	3	5%
Increasing Project Operation Cost	2	3%
Research and Development	1	2%

Question 19 asked about the major benefits that joint-project managers contribute to construction projects in the UAE. Table 5.19 summarized six benefits in the adoption of joint-project management. When properly executed, the joint-project management may

enhance team coordination, project success and quality of product; improve research and development mechanism; and control management and customer satisfaction.

Table 5.19 Major benefits of joint-project management

Elements (<i>n</i> =62)	# of participants to offer this experience	% of participants to offer this experience
Team Coordination	31	50%
Project Success	12	19%
Quality of Product	9	15%
Research and Development	5	8%
Management Control	3	5%
Customer Satisfaction	2	3%

Phase 5 Question 19 asked about the major cultural challenges encountered in construction projects in UAE. The challenges include adaptability, method of procedures, leadership, cultural matching, and cultural awareness.

Table 5.20 Cultural challenges encountered in construction projects

Elements (<i>n</i> =53)	# of participants to offer this experience	% of participants to offer this experience
Adaptability	22	42%
Method of Procedures	14	26%
Leadership	13	25%
Cultural Matching	3	6%
Awareness	1	2%

Phase 5 Question 20 asked the participants about the benefits of UAE culture to construction project delivery. Study participants indicated that the project management style of UAE contributed to the style of the project delivery of construction. Table 5.21 suggests seven benefits.

Table 5.21 Benefits of UAE culture to construction project delivery

Elements (<i>n</i> =51)	# of participants to offer this experience	% of participants to offer this experience
Project Management	14	27%
Leadership	11	22%
Staff Identity	10	20%
Communication	6	12%
Procurement	5	12%
Promotion of UAE Identify	3	6%
Process	2	4%

5.10 Summary of Chapter 5

The aim of this study was to analyze the influence of leadership styles on the construction project success and determine the impact of culture and other factors that affect project success. The sample respondents were mainly Arab males between the ages of 31 and 40; a large majority are well-educated, university degree holders and some master's degree holders, with a minimum of six years' experience. A large number of them were project managers in their mid-careers who have a good idea of leadership practice, and have actually provided it to a number of individuals during their work experience.

An analysis of leadership styles of construction practitioners in UAE was conducted and five leadership styles were analyzed; autocratic or authoritarian leadership style, bureaucratic style, democratic or participative style, charismatic, laissez-faire (delegative), and paternalistic. Furthermore, the attributes of leadership styles of the construction practitioners in UAE were analyzed and the relationship between demographic information and leadership styles was examined in detail. An attempt was made at interrelating the reliability of the questionnaire to understand, analyze and measure the impact of leadership on construction project success in UAE. An attempt was also made to interrelate the reliability of the questionnaire to investigate the impact of culture on construction project success in UAE, to be able to understand its effect on future construction project success.

A multiple linear regression model was conducted to determine the extent of the influences of the demographic information of the respondents on the impact of leadership on construction project success in UAE, to determine the impact of demographics on whether construction contractors in UAE like or dislike the concept of joint leadership of projects. Chapter 6 introduce the validation and discussion of the result.

CHAPTER SIX

Validation and Discussion of Results

6.1 Introduction

This chapter will discuss how a focus group was used to explore the rationale of the answers provided by the respondents in the questionnaire survey that was analysed in chapter 5. Section 6.2 introduces the focus group forum. Section 6.3 introduces results of focus group discussions and finally section 6.4 gives a summary of the chapter.

6.2 Face validity

Face validity was used to check the result obtained in chapter 5 for accuracy. It was also use to establish the meaning of results. Face validity is an estimate of the degree to which a measure is clearly and unambiguously tapping the construct it purports to assess. Thus, face validity refers to the “obviousness” of a test—the degree to which the purpose of the test is apparent to those taking it. Tests wherein the purpose is clear, even to naïve respondents, are said to have high face validity; tests wherein the purpose is unclear have low face validity (Nevo, 1985). Face validity is concerned with how the survey appears, and if it seems “like a reasonable way to gain the information the researchers are attempting to obtain” (Writing Guides, 2009).

In this research focus group forum was use to carry out the face validity. We can claim face validity from medium to high project managers as purpose is clear but as concept is newer hence less understanding of all respondents is expected. However in interviews and meetings understanding was also made clear.

6.3 The Focus Group Forum

This study utilized the focus group meeting among the qualitative data collection techniques. The objective of the focus group meetings was to get first-hand and face-to-face opinions of a few experienced project managers who were also participants in the quantitative survey. These participants were recruited from all trades of project management (design, supervision and project control, among others) who have experience and expertise in project management and have scientific and practical experience in project management.

Sampling

Participants were invited to the forum by phone. 20 people were invited to attend the forum; however, only 12 people attended. All these 12 individuals were involved in the original survey and were part of the 90 people who fully completed the questionnaire. The forum took place at the meeting room around 8:00 am at ADP offices .

After completing the quantitative analysis and obtaining the analysis results, the participants were invited to a focus group meeting so as to discuss the results and obtain their feedback and opinions.

6.3.1 Focus Group Discussions

The focus group took place at ADP offices at 8:00 am on March 2014 and lasted for four hours see figure 6.1 shows attends at this group discussion. During the conduct of the focus group discussion, the participants were divided into two workshops. In each session, the survey results were presented to all participants using a computer data show. The results were also printed out and distributed to all participants. After the results obtained from the survey were shown, a discussion took place about what the other project managers had stated in the survey, then each of the other points of the results were reviewed and talked about one by one. Each participant was asked to examine the results of the survey and make comments and inquiries. Participants were encouraged to express their opinions openly and inquire on all points on the survey to acquire comprehensive feedback. Everything went well on this session, as everyone has had his or her say on the overall results of the survey. By using this group discussion method, the feedback given was more positive and appreciated.



Figure 6.1: Participants at the questionnaire discussion forum

6.3.2 Analysis of Discussions

In this section, responses of the focus group discussions were collated and analyzed using the technique of content analysis. In this technique, different meanings of the responses were explored (Cassell & Symon, 2004) and clarified with the participants during the discussions. The objective of the content analysis was to provide common elements from the responses of participants to identify themes and emerging issues. This provided a means to generalize the responses that were appropriate for the questions posed for the study.

The focus group discussion generated additional qualitative descriptions concerning the reasons behind the study participants' perceptions on (a) the likelihood of Joint leadership of projects in UAE, (b) the impact of the concept of the project managers in UAE construction, and (c) the influences of UAE culture on construction projects. Using content analysis, the qualitative reasons behind the selection of agree, not agree, and neutral are presented.

6.4 Results of Focus Group Discussions

This section will discuss the joint leadership of projects, the impact of joint leadership on projects, and finally the influences of UAE culture on construction projects.

6.4.1 Joint Leadership of Projects

In Table 6.1, the participants indicated that the likelihood of joint leadership is possible considering that the approach advocates the sharing of management and responsibilities, effective management procedures, selection of effective leadership, perceived likelihood of success with two teams, implementation of checks and balances, and allowing the replacement of manager/s. On the contrary, costliness, delays, proneness to conflict, coordination issues, and the perception of being unnecessary are elements that the participants indicated to be not likely to implement. Three of the participants from the focus group discussions who responded neutrally indicated that the approach is dependent on the project responsibilities, issues, nature of the project, and stakeholders. Being neutral therefore did not signify lack of opinion or indifference. Rather, the specific circumstances surrounding each project should determine the likelihood of joint leadership.

Table 6.1 Likelihood of joint leadership of projects in UAE construction

Elements (<i>n</i> =12)	# of participants to offer this experience	% of participants to offer this experience
Reason for agreement		
Sharing of management and responsibilities (partners and client)	11	92%
Effective management procedures (time, resources, manpower)	7	58%
Selection of effective leadership	3	25%
Perceived likelihood of success with two teams	3	25%
Implementation of checks and balances	2	17%
Allow replacement of manager/s	1	8%

Reason for neutral response		
Depends on responsibilities, issue, project, and stakeholders	3	25%
Limited knowledge	3	25%
Appropriateness of the approach	2	17%
Impact of responsibility sharing	2	17%
Perceived to be similar to single project leadership	1	8%
Don't know the question	1	8%
Reasons for disagreement		
Costly and causes delay	7	58%
Prone to conflict	3	25%
Coordination issues	3	25%
Perceived to be unnecessary (one manager is enough)	2	17%

6.4.2 Impact of Joint Leadership on Projects

Knowledge-sharing, assurance of product quality, effective management, implemented efforts to ensure quality product, generation of ideas, and the likelihood of project success are the impact the participants have seen in the implementation of joint-project management. Concerning the neutrality of the responses, six elements were noted. However, five of the participants indicated that it depends on the work environment. As such, the approach is crucial to be considered in the implementation. See Table 6.2.

Table 6.2 The impact of the concept of joint-project management in UAE construction

Elements	# of participants to offer this experience	% of participants to offer this experience
Reason for agreement		
Knowledge-sharing	5	42%
Assurance of product quality	5	42%
Effective management (checks and balances)	4	33%
Implemented efforts to ensure quality product	4	33%
Generation of idea	2	17%
Likelihood of project success	2	17%
Reason for neutral response		
Depends on work environment	5	42%
Don't understand the question	2	17%
Observed no significant change	2	17%
Shared knowledge	1	8%
Could cause conflict and consequently project failure	1	8%
Uncertain due to the difficulty of implementing change	1	8%
Reasons for disagreement		
Costly	6	50%
Timely	6	50%
Differences of leaders	2	17%
Perceived to be unnecessary	2	17%

6.4.3 Influences of UAE Culture on Construction Projects

As cultural differences have been noted to affect the implementation of projects participated in by a diverse workforce, five elements representing the participants' reasons for agreeing were noted in the discussion. These elements include: (a) assurance of product quality, (b) project delays due to decision-making structure, (c) influences of culture from expatriates, (d) support given to project staff, and (e) consideration of different ideas. Seven elements noted that assurance of product quality is among the influence of UAE to the construction industry. These participants claimed that quality control to minimize risks was emphasized in the implementation of the construction projects. Three of the participants identified that with the number of non-working holidays due to holy celebrations, UAE influences a culture of tardiness causing delays in the project implementation. Two elements, *influence of expatriates' culture* and *provision of supports*, were noted to influence the construction industry. Only one of the participants identified that among the culture UAE contributed to the industry was being open-minded to different ideas from foreign workers.

In terms of the participants' neutral responses, six elements emerged from the transcripts. These include: (a) depends on environment and situation, (b) unclear vision, (c) depends on leadership, (d) observed no significant change, (e) have impact in the culture, and (f) no significant experience and knowledge. Four of the participants indicated that the influence of UAE culture depends on the environment and situations. These participants claimed that they cannot identify specific UAE culture because the workforce is manned with different cultures and practices. Three of the participants narrated that they cannot provide the UAE influences because UAE industry itself depends on the vision, knowledge, and skills of the expatriates. Two of the elements, *depends on leadership* and *observed no significant change*, were reported by two participants. These participants noted that changes are not notable since the work ruling and practices are dependent on the management, who are mostly expatriates. These elements were supported by the last two elements which suggest that UAE construction industry owes its growth to the knowledge and experiences of the expatriates working in UAE.

From the 10 participants who did not agree that UAE culture influences the construction industry, four elements emerged as their reasons for disagreeing. These reasons include: (a) constant project changes in cost and requirements, (b)

uncontrollable variables in the construction industry, (c) costly and causes delay, and (d) project failure. See Table 6.3.

Table 6.3 The influences of UAE culture on construction projects

Elements	# of participants to offer this experience	% of participants to offer this experience
Reason for agreement ($n=8$)		
Assurance of product quality	7	58%
Project delays due to decision-making structure	3	25%
Influences of culture from expatriates	2	17%
Support given to project staff	2	17%
Consideration of different ideas	1	8%
Reason for neutral response ($n=13$)		
Depends on environment and situation	4	33%
Unclear vision	3	25%
Depends on leadership	2	17%
Observed no significant change	2	17%
Has impact in the culture	1	8%
No significant experience and knowledge	1	8%
Reasons for disagreement ($n=10$)		
Constant project changes in cost and requirements	5	42%
Uncontrollable variables in the construction industry	4	33%
Costly and causes delay	2	17%
Project failure	2	17%

6.5 Summary of Chapter 6

Experienced personnel were brought together, in one forum, a focus group, in order for them to check the results. The focus group also provided a basis for comparing different opinions and the reasons for these differences.

The focus group was carried out successfully with 12 participants who provided insight into some key responses obtained from the questionnaire survey. All these 12 individuals were involved in the original survey and were part of the 90 people who fully completed the questionnaire. To each of the key questions on the effectiveness and impact of project leadership in UAE construction, the focus group was able to proffer reasons on the constructs presented. To each construct, they gave reasons as to why the initial respondents had rated these as: (strongly) agreed, neutral, or (strongly) disagreed. On the basis of the clarifications provided in the focus group, the answers provided by the respondents in the questionnaire can be rationalised. Thus these answers could be aggregated and used to generate meaning.

The findings of chapters 5 and 6 are used to draw conclusions as to what the practitioner-respondents thought about Joint leadership and culture and their impacts on project outcomes. The findings are used to develop framework for project management in UAE construction, especially where the concept of joint leadership is applicable. Chapter 7 introduces this proposed framework. How the framework was developed and validated is presented in Chapter 7.

Revamping of a Practice Framework for Leadership and Decision-making

7.1 Introduction

To develop a common framework for joint project leadership in UAE construction. More specifically, the objective would be to develop a distinct framework that both converges and improves upon the existing frameworks of the two project leaderships. In other words, the project would aim to eliminate the differences between the existing frameworks, and also refine, update and complete the frameworks. This chapter covers, first, the initial analysis of existing frameworks, which includes the main differences between the two frameworks and the key gaps or problems with the existing frameworks. Second, prioritization of issues, which includes the form and structure of the converged framework, project output and project management.

7.2 Main Findings

An extended study is conducted to find the key success factors behind joint project leadership. 90 project managers and leaders across various construction industry sectors throughout Abu Dhabi were surveyed about their joint venture experiences. The results reveal some fascinating insights, including key factors that contribute to successful joint project leaderships, and pitfalls to avoid. In an increasingly complex and uncertain environment, companies are further challenged to compete and co-operate across various industries and service groups. The main findings, presented in chapters five and six, help support our views on using joint-project leadership as a tool for growth and are mentioned below.

The main finding indicated that the majority of participants were leaders and a few were managers; regardless of the leadership style of all participants, most expressed dissatisfaction with joint-project leadership projects, and a few project managers did not have a clear vision of joint-project leadership frameworks. However, those who knew stated that joint leadership improved project success although it does cause increased delays. The study conveyed that culture has a significant impact on the types of leaders in UAE construction. Participants expressed that culture had a direct effect on the operations, durations, costs, and quality of construction projects. Moreover, participants stated that

culture has an influence on the design of construction buildings and other facilities, the use of team leadership in construction projects, and the clauses of the project contract. Most participants agree that UAE culture influences the overall project management of construction projects.

7.3 Adopting Findings from this Study

The construction industry is facing tough challenges to preserve productivity, deliver their strategic and operational plans, and stay poised to meet increasing customer demand. Project management plays an important role in addressing these issues by constantly applying improvements to processes. Organizations make an extra effort to invest in project management coaching, training and auditing to prepare for the future. Project management has powerful and effective tools and techniques that significantly improve productivity when applied properly.

7.3.1 Training

Project managers in leadership positions can benefit from better use of resources, more attention to risk management, better project cost and schedule estimating, and better project monitoring and control. Conducting project audits and health checks helps leadership project managers to identify the core reasons for lack of project success, to enable them immediately to place an action plan, to improve project performance.

Operations managers can benefit from the improvements in processes realized through project management and better allocation of resources, both people and monetary, as well as expansion of the organizational retained best practices. Better utilization of resources and improved systems of tracking the allocation of their resources across a number of projects helps improve staff efficiency and effectiveness.

Stakeholders receive earlier notice of project problems that may be indicators of more trouble to come, as well as better quality planning, quality assurance processes and quality acceptance steps, which are critical in today's competitive business environment. Additionally, stakeholders are able to better contain costs, scheduling and budgeting with professional project management. Project risk assessments such as a project audit or health check help to identify the early warning signs of potential problems, which might affect stakeholders, ensuring placing contingency plans to manage these risks effectively, reducing any negative impact on their key customers.

Project managers and team members experience much improved productivity of work by applying sound project planning processes. This is a result of clearer understanding of their roles and responsibilities, better definition of their work requirements, and less rework. Joint leadership is also heightened with effective collaboration and teamwork, which provides each individual the freedom to focus on the activities most aligned with their talents and passion. They will experience a reduction in stress and increase in a sense of control over the overall programme of operation.

Addressing culture awareness is a fundamental process in the construction industry in UAE due to the diversity of the labour market in the country. This helps adaptability in appreciating the conflicts that can exist between individuals' values and those of the organization for which they work. It also enhances the appreciation of the range of organizational cultures that may exist and recognizes their specific effect on the workplace, recognizing the value of delegated authority. This prepares leaders to coordinate with each other by using this knowledge within their own working environment to understand how the organization's legal and ethical obligations shape its impact on the environment.

7.3.2 Culture

New architecture has paid slight attention to the social and cultural needs of the local community. As a result, urbanization and modernization radically affected tribal and family structures. Recent building structures are well-designed, with added technological innovations, have become a feature in major cities of UAE.

Nowadays a concern for cultural continuity is evident in the more recent urban development plans and in the use of elements of traditional architecture in the design of new buildings, as well as renewed efforts to preserve and maintain traditional buildings. Economic prosperity and the significant increase in population had a huge social and cultural impact, and urgent demand for public buildings and private housing. Modern designs and building materials replaced the old vernacular architecture, and sleek glass-fronted skyscrapers altered the urban landscape.

The International Federation of Consulting Engineers (FIDIC) over the years has issued a number of standard documents for use in construction projects. The contracts that are currently in most common use around the world are The Conditions of Contract for Construction (The 1999 Red Book); The Conditions of Contract for Plant and Design-Build (The 1999 Yellow Book); and The Conditions of Contract for EPC

Turnkey Projects (The 1999 Silver Book). Business practices have information for consulting engineers on risk management, project sustainability management, environment, quality management, integrity management, dispute resolution techniques, insurance, capacity building, transfer of technology, law, and other business issues. Training guides for quality-based selection, procurement and tendering procedures, consultant selection, quality of construction and other documents about the use of consulting engineers.

7.3.3 Project Managers and the Same Style of Leadership

The general management literature views effective leadership as a critical success factor in the management of organizations, and has shown that an appropriate leadership style can lead to better performance. Thamain (2004) has shown that the working environment within the project team has a significant impact on project success. Many of the models from the behavioural school balanced concern for people and concern for the task (see Adair, 1983; Blake & Mouton, 1978; Hershey & Blanchard, 1988; Tannenbaum & Schmidt, 1958). Theoretically, there seems to be a significant correlation between the manager's leadership style and commitment, motivation, and stress of the project's teams. Project managers have a significant leadership role in blending their teams.

7.3.4 Promote Joint Leadership

For the delivery of collaborative working projects, terms of joint objectives are agreed on at the pre-contract stage, and these terms are revisited after contract to ensure clarity of focus. Joint leaders are encouraged to highlight their objectives, which are supported and regarded as appropriate by stakeholders. These terms shall be incorporated in the joint agreement plan, and incorporated into the project contract. Joint-project managers clearly identify their roles in the contract and specify their responsibilities in detail. The project manager shall integrate a high-level organization chart, which identifies key roles. This will start from the perspective of the project and then evolve through the development of the relationship to form a contractual agreement. This may take the form of a highly collaborative agreement, or a more traditional contract supported by a project management affiliation plan. Joint relationships frequently involve complex organization and governance structures, and it is important to establish a high-level governance structure as part of the joint relationship plan. The project manager shall

incorporate a summary of the key contract agreement aspects that will support the daily interactions between the joint leaderships. To ensure that the project teams and their partners embed the appropriate behaviours, there shall be a collaborative agreement developed that captures the key elements of the project's vision and values together with an articulation of the desired behaviours adopted within the relationship.

Senior executives from each partner identified, and organization governance and project plans that ensure effective management, are established. Where practical, an overall team leader is appointed to drive the project. The project leadership shall be selected based upon suitable experience and capability. This appointment will also need to be consistent with the provisions of the contract being utilised (e.g. the role of the client's representative).

7.3.5 Minimize Chains in Line of Communication

Effective management of information is crucial to project success, which involves establishing a joint process to manage knowledge and information flows across the relationship. The joint management team shall develop and implement an effective communications plan to ensure that all stakeholders internally and externally are appropriately informed.

7.3.6 Use Joint Leadership where Appropriate

To establish a continuous improvement process to ensure compliance and corrective actions where appropriate. The essence of any collaborative project plan is that it not only meets performance targets and delivers the primary objectives, but also seeks to create additional value through collaboration. For projects delivered through collaborative work, the baseline for developing a value creation approach is incorporated in the project plan. This includes value management and value engineering opportunities. A value record is prompted to reflect both direct and indirect benefits from joint work beyond the initial project plan objectives.

7.4 The Framework

7.4.1 Current Framework

The main Abu Dhabi Police organization structure consists of the following administrations and sections (see Figure 7.1):

- General Directory office
- Strategy and Performance Development Section
- Human Resource and Support Services Section
- Finance Affairs Section
- Design and Operation Administration
- Building Maintenance Administration
- Projects Administration

The roles and activities of some of the important administrations of the Abu Dhabi Police organization structure will be briefly highlighted below:

- The Design and Operation Administration performs the initial designs for all capital projects.
- The Building Maintenance Administration performs the administrative works of the projects after all the construction work is complete. It undergoes all types of maintenance (general maintenance, urgent maintenance, and temporary maintenance).
- The Projects Administration manages the projects from the design stage to the initial handover stage after the building construction is completed.
- The Human Resource and Support Services section's primary activity is to create contracts and obtain approvals from contractors and consultants. The department also creates training and development plans for AD Police employees for training and coaching purposes.

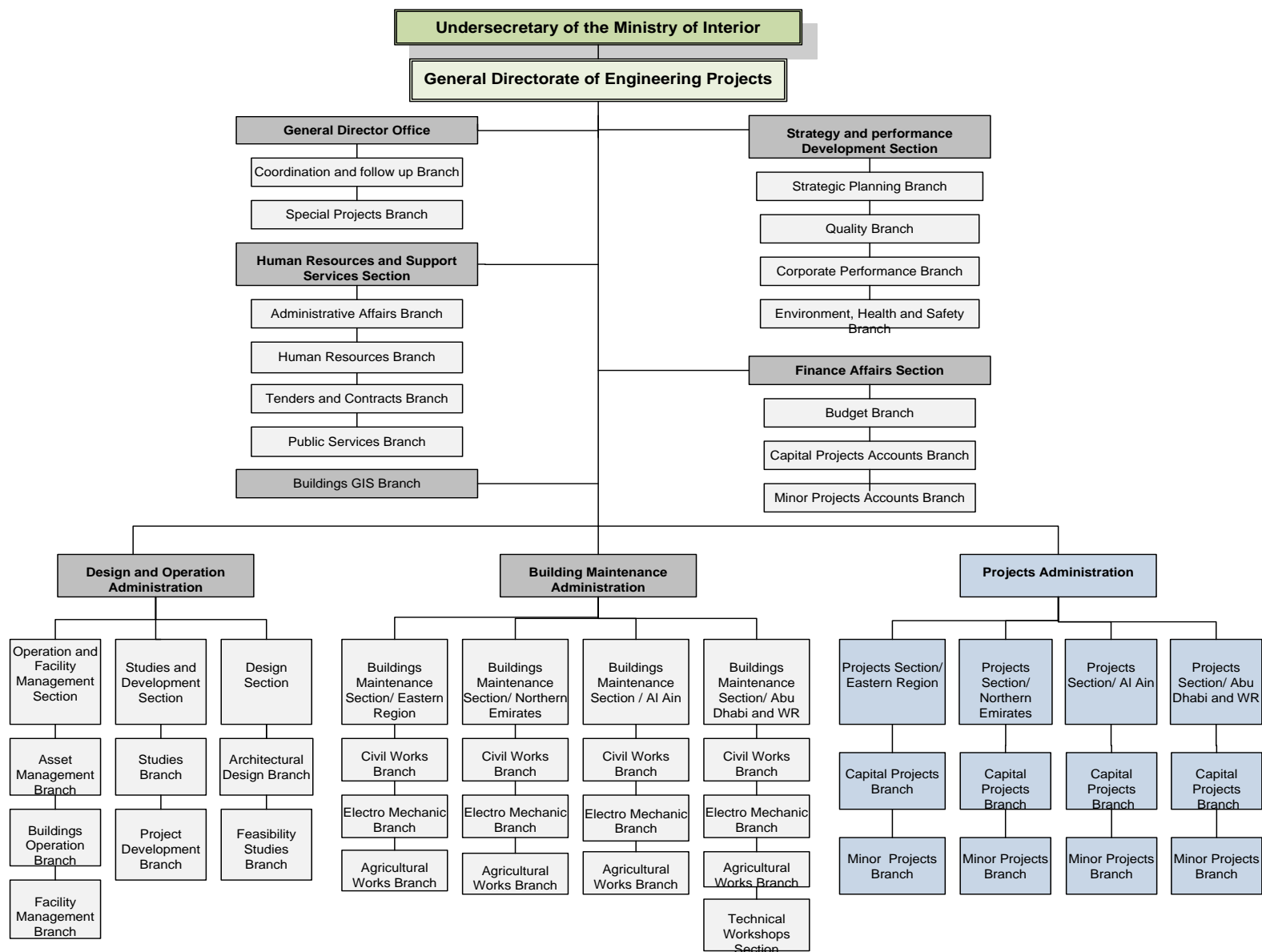


Figure 7.1 The Abu Dhabi Police Organization structure (2014)

7.4.2 Improved Framework

To provide a basis for adopting the findings of this research in practice, a framework is proposed which will guide future clients who wish to use joint-project leaders (see Figure 7.2).

Process and steps of the new improved framework

1. New capital project, approved by Executive Council.
2. Start of new capital project procedures.
3. Design of new project (concept design).
4. Architect design branch whose main function is to design a new project design concept. The architect design is to develop an initial design standard to reflect UAE culture.
5. Choosing the design consultant.
6. Tender & Contract Branch, whose function is to choose the design consultant since it is a complicated process.
7. Design new buildings or facilities (detail design) by the consultant.
8. The concept of joint leadership is promoted at this stage to all internal and external stakeholders of the joint project, and the preparation of all the necessary agreements and plans before the construction begins (Point 9).
9. The Capital Projects Branch, whose main task is to:
 - 1) Appoint project managers from owner and PMO;
 - 2) Check that two project managers on one project have the same style of leadership;
 - 3) Use joint leadership where appropriate.
10. The consultant prepares tender documents.
11. The Tender & Contracts Branch Human Resource Branch, whose main task is to provide:
 - Training opportunities for project managers in leadership (basic, intermediate, advanced).
 - Training opportunities for project managers in management (basic, intermediate, advanced).
 - Training opportunities for project managers who have no engineering background (basic, intermediate, and advanced).
 - Training of project managers in collaborative work (joint leadership, communication).
 - Yearly training on culture and leadership in UAE (adaptable, coordination).

-
- Conditions on contract to reflect UAE culture (FIDIC - UAE version).
 - Joint-project managers to be clearly identified in contract and their roles to be specified.
12. Tender action to select a contractor, once the contractor is chosen it goes to.
 13. Capital Projects Branch, which
 - Appoints a project manager selected by the consultant.
 14. Construction begins by the chosen contractor.
 15. During the construction phase, all the joint leadership are to be involved in the process of overseeing, all as per the joint leadership agreement:
 - Project manager consultant,
 - Project manager PMO,
 - Project manager owner.
 16. Complete construction and handover.
 17. Once handover is initiated, the Building Maintenance Administration takes over the project for the administration of the facility.
 18. Operation of facilities.

Improved Framework

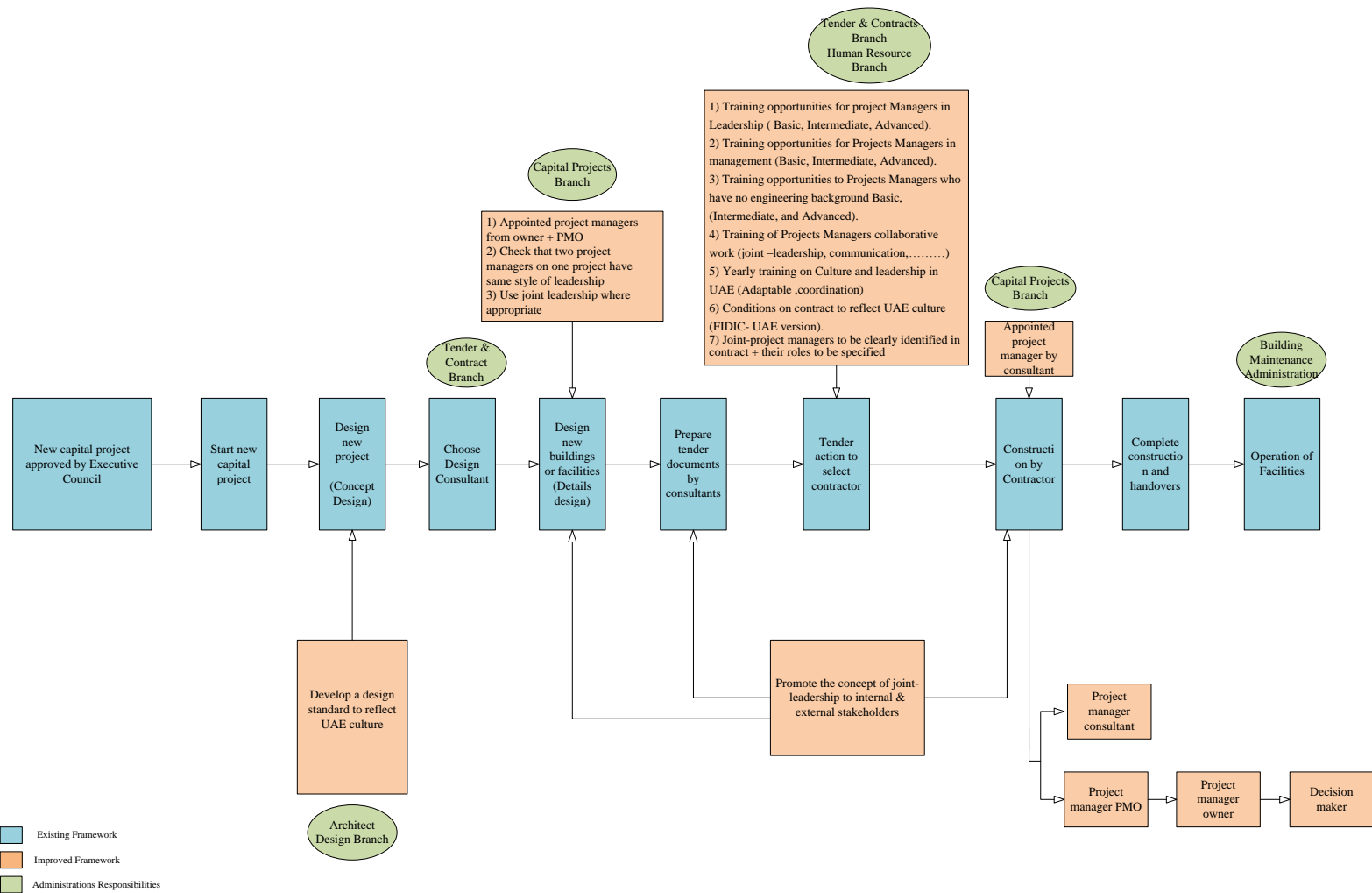


Figure 7.2 Improved Framework

7.5 Validation of the Framework

The improved framework developed, was validated by a survey which was created with 12 questions and distributed to 10 project managers and leaders. All these 10 individuals were involved in the original survey and were part of the 90 people who fully completed the questionnaire. 60% of the respondents had very high knowledge of AD Police projects and procedures, and the remaining 40% had high knowledge. The breakdown of responses on the statements is summarized in Table 7.1.

The statistics showed that all the respondents agreed that the improved framework was easy to understand. 90% agreed that the improved framework will reduce communication time, and all agreed it would improve the choice of joint leaders (two project managers) for the same project. When respondents were asked if the new improved framework would help UAE culture to be communicated better in project designs, 80% agreed. Everyone agreed that the improved framework would help project managers with no engineering background through training. All respondents agreed that it would increase internal stakeholders' understanding of joint leadership in AD police projects. 90% concurred that it would increase the understanding of the FIDIC contract in AD police projects. 100% agreed that it would assist AD police projects managers' training to address effective and efficient leadership. The majority of respondents (80%) agreed the improved framework will make the contracts for AD police projects reflect UAE culture. Everyone agreed it would help in improving quality due to appointing a project manager by consultants. The overall opinion of the framework is that it is commendable because it improves the quality of the work, improves the time and efficiency of the performance, the process and procedure used are clear, and it also reduces the time of communication. Besides all this, new practices and applications are used for the effectiveness and efficiency of the construction project.

Table 7.1: An improved framework for more effective joint leadership in construction projects by Abu Dhabi

No.		Frequency	Per cent
1	The improved framework is?		
	Easy to understand	10	100%
	Difficult to understand	0	0%
	Neither easy nor difficult to understand	0	0%
2	The improved framework will?		
	Reduce communication time	9	90%
	Not reduce communication time	0	0%
	Not impact on communication time	1	10%
3	The improved framework will?		
	Improve the choice of joint leaders (two project managers) for the same project.	10	100%
	Not improve the choice of joint leaders (two project managers) for the same project.	0	0%
	Have little impact on improving the choice of joint leaders (two Project Managers) for the same project.	0	0%
4	The improved framework will?		
	Help UAE culture to be communicated better in project designs	8	80%
	Not help UAE culture to be communicated better in project designs	0	0%
	Reflect only some aspects of UAE culture in project designs	2	20%
5	The improved framework will?		
	Help project managers with no engineering background through training	10	100%
	Not help project managers with no engineering background through training	0	0%
	Not impact on project managers that have no engineering background	0	0%

6	The improved framework will?		
	Increase internal stakeholders' understanding of joint leadership in AD police projects	10	100%
	Decrease internal stakeholders' understanding of joint leadership in AD police projects	0	0%
	Not affect internal stakeholders' understanding of joint leadership in AD police projects	0	0%
7	The improved framework will?		
	Increase external stakeholders understanding of joint- leadership in AD police projects	9	90%
	Decrease external stakeholders understanding of joint- leadership in AD police projects	0	0%
	Not affect external stakeholders understanding of Joint leadership in AD police projects	1	10%
8	The improved framework will?		
	Increase the understanding of the FIDIC contract in AD police projects	9	90%
	Decrease the understanding of the FIDIC contract in AD police projects	0	0
	Not affect the understanding of the FIDIC contract in AD police projects	1	10%
9	The improved framework will?		
	Make AD police project managers' training address effective and efficient leadership	10	100%
	Not make AD police project managers' training address effective and efficient leadership	0	0%
	Not affect the effectiveness and efficiency of AD police project managers	0	0%

10	The improved framework will make the contracts for AD police projects reflect UAE culture?		
	Agree	9	90%
	Not agree	0	0%
	No comments	1	10%
11	The improved framework will?		
	Help in improving quality due to the appointment of project manager by consultants	10	100%
	Not help in improving quality due to the appointment of project manager by consultants	0	0%
	No effect	0	0%
12	Your knowledge of AD Police projects and procedures is		
	Low		
	Moderate		
	High	6	60%
	Very High	4	40%

7.6 Endorsement of the improved Framework

As recorded from the statistical results obtained from the survey (see Table 7.5), it was evident that the improved framework improves many aspects of project management in construction buildings. The majority of project managers and leaders who participated in the survey acknowledged that they preferred the improved version of the framework because of the many advantages that it provided over the current version. As a consequence of this endorsement, the improved framework was recommended to ADP for usage.

The improved framework was mainly recommended because it improves the quality of work outputs. The main survey had established a connection between leadership and project outcomes. In particular, the respondents had felt that Joint leadership was a

contributor to project success. Hence the adoption of Joint leadership in the improved framework would augur well for product quality in construction in especially AD.

The revised framework improves the time and efficiency of the performance of projects. By considering cultural factors in UAE construction, some usual stakeholder conflicts are avoided. Also, by choosing two project managers that complement each other, the effectiveness and efficiency of their operations are enhanced and this would transcend to the project outcomes. It means that projects can now be completed successfully at a faster pace.

The improved framework uses processes and procedures that are clear, which helps reduce the time of communication. Misunderstandings which would otherwise delay projects while either clarity or corrections are sought are now avoidable. Many issues are clarified upfront especially in the contracts and that makes it smoother to implement these projects.

Overall, the improved framework allows new practices and applications to be used effectively and efficiently, which enhances completion time of the construction project improvement. It ushers an improved approach which fits in well with the ethos of an ever improving ADP.

7.7 Summary of Chapter 7

In this chapter, the existing framework for project implementation by ADP was analyzed, and areas where it could be improved were identified from the findings of the research. Using these research results, improved framework was developed and introduced to ADP. This improved framework for joint-project leadership in UAE construction was developed and discussed in the chapter. The chapter covered the main differences between the two frameworks and the key gaps with the existing framework in order to remove the deficiency and discrepancies and improve efficiency.

Areas of improvement considered concerned procedures and criteria for selecting joint project leaders in UAE construction. The impact of Arab culture in especially the design of facilities came out as a key issue and this need to be considered in projects. The use of Joint leadership in UAE construction is feasible and was adopted the revised framework. As the old framework for implementing construction projects by ADP was considered, areas of duplicity and inconsistency were addressed leading to a streamlining of facets to make it more efficient. While the old framework was effective, there were opportunities to

enhance its efficiency and this formed the basis of the tweaking of the old into a newer framework which should be much more workable.

The proposed improved framework was validated for acceptability. It was best to carry out this test with current and potential users. Hence, a survey questionnaire was distributed to project managers of ADP, to analyze overall performance of the improved framework. The survey asked them to rate the efficacy and benefits of the improved framework. The statistical results from this survey indicated that the improved framework had a positive impact on quality, time and efficiency, and made the process and procedure more clear. The survey also verified that the improved framework reduced time and communication methods, besides which the use of new practices and applications were perceived.

On the basis of the positive views obtained from the validation survey, the improved framework has been recommended to ADP for uptake. As the researcher works with ADP, it was possible to communicate the recommendation quite quickly. ADP on their part have embraced the improved framework are already implementing it. This then brought the research to an end and informed the main conclusions and recommendations of chapter 8.

CHAPTER EIGHT

Conclusions and Recommendations

8.1 Introduction

This chapter presents conclusion of the research study on operational effectiveness and associated impact on project management leadership in the construction industry in Abu Dhabi. The chapter explains various achievements towards its research aim and objectives thereafter deals with the answers for the research questions. It also highlights the contribution to the knowledge followed by conclusion and recommendations for future research and organisations and in particular to the ADP

8.2 Achievement of Research Aim and Objectives

The aim of this research is to evaluate the operational effectiveness and associated impacts of project management leadership in the construction industry in Abu Dhabi, with a particular emphasis on the Joint leadership model.

1. Objective one of this research was to carry out a literature review on group leadership theories, analysing different leadership types and styles with their advantages, disadvantages, and situations where they are most useful in construction, as well as their varying effectiveness towards project success. This was done in Chapter 2. A literature review of the major leadership theories, practices, models, and their influences in the Arab world was discussed, and there was a closer look at the benefits and disadvantages of some of the different leadership styles and their effectiveness in the construction field.
2. Objective two of the research was to review and evaluate literature on project management and culture in construction. This was discussed thoroughly in Chapter 3, where culture was introduced and its impact and effect on construction projects explained. Moreover, Arab culture was looked into and a highlight of the influence of Arab culture on construction projects was discussed. Some of the outstanding problems faced by culture in the UAE construction industry were also reviewed.
3. Objective three to objective seven of the study was to collect and analyse data through fieldwork on the cultural traits by enlisting leadership styles in UAE construction as well as the challenges being faced. Followed by developing and

validating the framework. Chapter 4 provided an overview of the research methodology followed by the population sample and the ethical approval of the research data collected. It had three phases of data collection from the field. The first phase of data was collected through a questionnaire survey (discussed in Chapter 5), followed by focus group (discussed in Chapter 6) and then the questionnaire (discussed in Chapter 7).

In Chapter 5 the focus was on analysing the influence of leadership styles of construction practitioners in UAE. A detailed discussion of the results obtained from the data collected from the questionnaire survey was covered. The research findings were grouped into two categories: leadership style and leadership attributes. Thereafter, the research study collected data through a focus group forum on the impact of joint leadership on project success.

Chapter 6 discussed in detail this method and explained how and when the data was collected and analysed. This provided an insight into the effectiveness of project manager leadership from theories and practice. The results are specifically applied to the construction projects in Abu Dhabi. These findings lead to development of a framework.

In Chapter 7, a new, improved framework for joint project leadership in UAE construction was developed and validated; the chapter analysed the existing framework, and made an improved framework that illuminated the key gaps or problems with the existing framework. The chapter also tried to prioritise these issues, which included introducing new forms and new structures for the improved framework, covering the project output and project management plans.

This leads on to Chapter 8, a conclusion of the research study, which recorded the various achievements of the research aim and objectives. Lastly, a number of recommendations were formulated and attempts were made to provide suggestions for future research.

8.3 Research Questions Answered by this Research Study

- 1- What are the types of leadership styles preferred by the employees in the construction industry of Abu Dhabi?

After the detailed analysis of the results the most used leadership styles were found to be bureaucratic, charismatic and laissez-faire (delegative).

- 2- How applicable is the Joint leadership model in the construction industry of Abu Dhabi?

Respondents during the survey did not seem sure about the Joint leadership model. Only 33% had a good idea about this model, and only 46% agreed it would lead to project success.

- 3- What is the impact of joint leadership on construction project outcomes in Abu Dhabi?

The results showed that team coordination, project success, quality of projects, research and development, management control, and customer satisfaction are some of the major impacts in Joint leadership projects in Abu Dhabi.

- 4- How acceptable is joint leadership in construction in Abu Dhabi?

From the survey administered it was clear that project managers are hesitant about the concept of joint leadership, and many did not have a clear idea of the concept, or thought it would lead to a lengthy decision-making process as well as adding to project overhead costs.

- 5- What factors would enhance the implementation of joint leadership in Abu Dhabi construction?

The main factors associated with effective implementation of Joint leadership projects are management control, leadership, coordination management, project timeline, project staff accountability, and misunderstanding of policies/guidelines (contract), project goal setting, increasing project operation cost, and research and development.

8.4 Contribution to Knowledge

This research uniquely provides knowledge about joint leadership in project management in UAE. Joint leadership in the construction industry is a new concept, hence most of the project managers are hesitant to comment on it. But in Arab culture it could be very beneficial if the type of leadership which has been identified by the most recipients is taken into account. Furthermore, the impact of such types of leadership and its pros and cons can contribute a valuable addition to the knowledge of the reader.

8.5 Conclusions

In conclusion, emphasis could be placed on the possibility of minimising the communication chain in the existing practices by developing an improved framework where project managers can manage projects effectively. Additionally it can be concluded that in order for projects with joint leaders to go smoothly, it is highly recommended that project managers with the same leadership style should work together to maximise productivity and efficiency. Furthermore, it is concluded that the application of joint leadership depends on the project type, which in turn depends mainly on the significance of the project, cost / value of the project, and the distinctive nature of projects.

As a final point, it is urged that all construction project contracts in the UAE to be modified in such a way as to clearly identify the roles and responsibility of each project manager where joint leadership is operational, as well as to distinctly reflect UAE culture. This will minimise conflicts.

8.6 Recommendations

8.6.1 Recommendations for Future Research

The study has led to some recommendations and suggestions for future research. Future research should examine which leadership style is used in Abu Dhabi, including the relationship between leadership style and independently measured performance, as most of the participants have agreed that the leadership styles used in UAE influence the operations of project managers. Additionally deserving attention is the assessment of the effects of skill levels, career aspirations, and realistic expectations project managers have on perceptions of leadership. Most of the research participants are agreed that project success in UAE construction is a direct function of the leadership style used.

Another scholarly future research about culture plays a significant factor in the successful implementation of projects, and it was established in the research that it has a direct effect on cost and quality of projects. In UAE specifically, culture has a significant impact on the kind of leadership style adopted in construction projects. In future, more light needs to be shed on this particular area, to enable project managers to recognize the effects of culture and leadership style adopted. In addition, the risks of cost and quality associated with that need to be assessed, to enable improvement of systems by implementing consistent leadership styles.

8.6.2 Recommendations for organisations

It is recommended that project managers should be well-trained and have some level of leadership skills in accordance with their positions; whether they are at a basic, intermediate or advanced management level, which is important for projects to run more efficiently. It is proposed that project managers are to be given sufficient training on UAE cultural issues and in assessing and dealing with the risks associated with this, in order to minimize and reduce consequences that can result from this matter. Culture plays a significant factor in the successful implementation of quality, and project managers need training to recognize the value of employee performance, to motivate the necessary drive for quality culture and stakeholders to achieve workers' commitment to any quality improvement systems. A wider training on UAE culture is important as many non-UAE nationals work in the country. This training is especially relevant to non-UAE nationals but is appropriate and beneficial for all managers.

These recommendations will be most useful to ADP and other construction clients who especially use the concept of joint-project management in UAE.

8.7 Summary of Chapter 8

Finally, in this chapter some conclusions were drawn from the research study about the operational effectiveness and associated impact on project management leadership in the construction industry in Abu Dhabi. The chapter listed some of the various achievements of the research aim and objectives. Additionally, it gave a number of recommendations and suggestions for a number of implications for future research.

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❖ Appendix A

THE IMPACTS OF LEADERSHIP ON CONSTRUCTION PROJECT DELIVERY IN THE UAE

(A QUESTIONNAIRE FOR CONSTRUCTION PRACTITIONERS IN THE UAE)

Instructions

Please answer all questions and follow the instructions in each section

Part -1

Please indicate the following:

DEMOGRAPHIC & GENERAL INFORMATION

1. Your gender.....: Male ☐ Female ☐
2. Your age: Years 20-30 ☐ 31-40 ☐ 41-51 ☐ >51 ☐
3. Your educational level.....: Under Graduate ☐ Bachelor ☐ Master ☐ PhD ☐
4. Your length of construction experience in the UAE is
Years 0-2 ☐ 3-5 ☐ 6-10 ☐ 10-14 ☐ ≥15 ☐
5. Your nationality is: UAE ☐ Other Arab ☐ Non- Arab ☐
7. Your spoken language(s).....: Arabic ☐ English ☐ Others (please specify)
.....
8. Your Job cadre.....: Line Manager ☐ Middle Management ☐ Top Management
☐
9. Your Job Title Project Manager ☐ Project Engineer ☐ Design
Manager ☐ Cost Control Manager ☐
HSE Manager ☐ Quality Manager ☐
☐ Other (Please specify).....

10. In a construction project; you provide leadership to;

No one ☐ 1-5 people ☐ 6-10 people ☐ 11-20 people ☐ over 20 people ☐

11. In construction; you have been a leader for;

0-2 years ☐ 3-5 years ☐ 6-14 years ☐ ≥ 15 years ☐

12- Please rate the success of your leadership; where applicable:

Not sure ☐ Not Successful ☐ Adequate ☐ Good ☐ Excellent ☐

Part-2

LEADERSHIP STYLE

Please describe your Leadership style in sections A-F below:

Please provide your answers by ticking on the 5-point rating scale provided

A- Leadership Style 1:

In the course of a project:

1. I like to keep total control and authority with me
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
2. I like to make Project related decisions, myself
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
3. Concerning projects, I like to keep total control and responsibility with me
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
4. I always I like to have a clear structure and fixed targets
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
5. Me and my staff have sufficient skills to execute our projects; and have no need of further training
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
6. When Workers are not performing well, they must be punished
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

B- Leadership Style 2:

In the course of a project:

1. I like rules and regulations to be followed strictly
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

-
2. I like to have full authority related to my position on the project

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

3. I focus on control and consistent outputs

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

4. Following the rules and regulations is one of my priorities

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

5. I reward workers based on their ability to follow the rules

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

C- Leadership Style 3:

In the course of a project:

1. I like to share the decision making responsibility with my team members

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

2. I like to share the decision making responsibility with only my creative team members

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

3. I focus on authority and limited control

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

4. I like to have feedback from all team members on decisions made

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

5. The development of my team members is one of my priorities

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

6. I like to share credit or incentives with all team members

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

D- Leadership Style 4:

In the course of a project:

1. I have special qualities to inspire team members

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

2. I like to promote the vision and mission of the organization throughout a project

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

3. I like to develop a personal relationship with members of the project team

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

-
4. I like to develop the skills of each member of the project team
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
 5. I keenly address the cares and needs of team members
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

E-Leadership Style 5:

In the course of a project:

1. I delegate authority to talented, capable and entrusted team members
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
2. I like to delegate tasks to talented and entrusted employees
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
3. I focus on trust and confidence building among team members
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
4. I like to manage people who manage the job
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
5. I like to reward team members according to their performance
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
6. I like to reward team members according to the results they are achieving
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

F-Leadership Style 6:

In the course of a project:

1. I consider my team members as my children
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
2. I like to act as a father to all my employees
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
3. I focus on regulating the conduct of team members towards me
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
4. I focus on regulating the conduct of team members towards each other
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
5. I like to consult my team members before making a decision
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
6. I like to use power to control and , - punish subordinates
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

7. I like to use power to protect and reward subordinates

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

8. I am interested in knowing how my workers feel

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

Part -3

LEADERSHIP TYPE

Please describe yourself using the attributes below (tick as many as applicable in both Box 1 and Box 2)

Box 1	Box 2
Rational <input type="checkbox"/>	Visionary <input type="checkbox"/>
Persistent <input type="checkbox"/>	Creative <input type="checkbox"/>
Analytical <input type="checkbox"/>	Innovative <input type="checkbox"/>
Stabilizer <input type="checkbox"/>	Independent <input type="checkbox"/>
Deliberative (careful thought) <input type="checkbox"/>	Imaginary <input type="checkbox"/>
Structured <input type="checkbox"/>	Courageous <input type="checkbox"/>
Business like <input type="checkbox"/>	Passionate <input type="checkbox"/>
Cold and Reserved <input type="checkbox"/>	Warm and Radiant <input type="checkbox"/>
Rarely admit being wrong <input type="checkbox"/>	Express humility <input type="checkbox"/>
Centralized information <input type="checkbox"/>	Shares Knowledge <input type="checkbox"/>
Tough minded <input type="checkbox"/>	Inspiring <input type="checkbox"/>
Guarded <input type="checkbox"/>	Trusting <input type="checkbox"/>
Act as a boss <input type="checkbox"/>	Act as coach or consultant <input type="checkbox"/>

Part -4

IMPACT OF LEADERSHIP ON CONSTRUCTION PROJECT SUCCESS IN THE UAE

Please tick your answers as before

1. The leadership styles used in the UAE influence the operations of project managers
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
2. Project success in UAE construction is a direct function of the leadership style used
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
3. A Project Manager with (no) engineering background can equally be successful
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
4. I am familiar with the concept of group leadership in construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
5. I am (or have been) involved with group leadership in construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
6. The concept of Joint leadership is well understood in the UAE construction sector
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
7. In the UAE; an inexperienced individual can jointly lead a project successfully alongside an experienced project manager
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
8. Construction workers in the UAE do not like the concept of Joint leadership of projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
9. Construction Contractors in the UAE do not like the concept of Joint leadership of projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
10. Suppliers to UAE construction projects do not like the concept of joint project-leadership
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
11. Project Managers do not like the concept of Joint leadership in UAE construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
12. Joint leadership in UAE construction leads to lengthy decision making processes
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
13. The concept of joint-Project Managers in UAE construction leads to more project delays
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
14. The concept of joint-Project Managers in UAE construction leads to greater project success
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
15. The concept of joint-project Managers in UAE construction adds more to project overhead costs
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
16. The concept of joint-project Managers in UAE construction is unnecessary
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

17. The concept of joint-project Managers is unique to UAE construction

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

18. Please identify the major challenges which joint-Project Managers face in the UAE (Please list as many as possible)

1-

2-

3-

4-

5-

19. Please identify the major benefits which joint-Project Managers contribute to construction Projects in the UAE(Please list as many as possible):

1-

2-

3-

4-

5-

Part -5

IMPACT OF CULTURE ON CONSTRUCTION PROJECT SUCCESS IN THE UAE

Please tick your answers as before

1. I am fully familiar with the UAE culture

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

2. Culture has a significant impact on the types of leaders in UAE construction

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

3. The UAE culture has a significant impact on the adoption of leadership style in construction.

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

4. The UAE culture influences construction operations on site

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

5. The UAE culture influences the durations of construction projects

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

6. The UAE culture influences the price of construction projects

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

7. The UAE culture influences the quality of construction projects

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

8. The UAE culture influences the design of construction buildings and other facilities

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

-
9. The UAE culture influences the way project teams relate with each other
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
10. The UAE culture influences how contractors relate with other stakeholders
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
11. The UAE culture contributes to more disputes in construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
12. The UAE culture contributes to lesser dispute in construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
13. The UAE culture influences the way construction disputes or issues are resolved
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
14. The UAE culture influences the Conditions of Contract used on construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
15. The UAE culture influences the overall project management of construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
16. The UAE culture influences the use of team leadership in construction projects
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
17. The UAE culture is a barrier to project success in UAE construction
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
18. A project Manager with no engineering background is likely to face more challenges
Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐
19. Please identify the major cultural challenges you have faced in your construction projects in the UAE (Please list as many as possible)?
- 1-
- 2-
- 3-
- 4-
- 5-
20. Please identify the benefits of UAE culture to construction project delivery (Please list as many as possible)?
- 1-
- 2-
- 3-
- 4-
- 5-

Please comment generally on any aspect of culture or project leadership which has not been addressed by the foregoing questions

.....

.....

.....

.....

.....

.....

.....

End of questionnaire

THANK YOU VERY MUCH FOR YOUR TIME AND RESPONSES

Please return completed questionnaire to:

Eng Hamad AlShamisi

Address: UAE –Abu Dhabi-AL Ain

PO. Box: 19016

Mobile: 050-9998994

Email: Al_asri007@yahoo.com

H.AlShamisi@wlv.ac.uk

❖ Appendix B

Focus Group discussion

Culture and leadership in UAE construction

Sample of questions to ask during the focus group discussion.

Group or Session No.1

The following shows results from a recent questionnaire survey

The likability of Joint leadership of projects in UAE construction – results show that

The following persons do not like the concept of Joint leadership of projects in the UAE	Responses: Number (percentages)				
	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Construction workers	2 (2.3%)	24 (27.6%)	40 (46%)	20 (23%)	1 (1.1%)
Construction Contractors	2 (2.2%)	26 (29.2%)	36 (40.4%)	24 (27%)	1 (1.1%)
Suppliers	0 (0%)	25 (28.4%)	40 (45.5%)	22 (25%)	1 (1.1%)
Project Managers	1 (1.1%)	23 (25.8%)	37 (41.6%)	27 (30.3%)	1 (1.1%)
Why?					

NB: Joint leadership = more than one project manager/leader

Questions:

1. Why do some people like Joint leadership in construction projects?
2. Why is it that some people do not like Joint leadership in construction projects?
3. Why were so many people ‘neutral’ in this survey?
4. Any other comment on the desirability of Joint leadership in construction projects in the UAE?

The impact of the concept of joint-Project Managers in UAE construction – results show that

The following persons believe on what the concept of joint-Project Managers leads	Responses: Number (percentages)				
	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Lengthy decision making processes	6 (6.7%)	36 (40.4%)	30 (33.7%)	17 (19.1%)	0 (0%)
Project delays	8 (9%)	21 (23.6%)	28 (31.5%)	29 (32.6)	3 (3.4%)
Greater project success	8 (9.1%)	33 (37.5%)	38 (43.2%)	8 (9.1%)	1 (1.1%)
Adds more to project overhead costs	7 (7.9%)	25 (28.1%)	39 (43.8%)	18 (20.2%)	0 (0%)
Unnecessary	4 (4.5%)	11 (12.4%)	42 (47.2%)	29 (32.6%)	3 (3.4%)
Unique	4 (4.5%)	19 (21.6%)	45 (51.1%)	20 (22.7%)	0 (0%)
Why?					

Questions:

1. Some people felt positive about the nature and effects of Joint leadership in construction projects (i.e. shaded green). Why?
2. Some other people felt more negative about the nature and effects of Joint leadership in construction projects (i.e. shaded red). Why?
3. Why were some people ‘neutral’ in this survey?
4. Any other comment on the nature and effects of Joint leadership in construction projects in the UAE?

Group or Session No.2

The following shows results from a recent questionnaire survey

The influences of UAE culture on construction projects – results show that

The following persons give opinions on the influences of UAE culture on Construction projects	Responses: Number (percentages)				
	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Impact on the adoption of leadership style in construction	14 (15.7%)	54 (60.7%)	16 (18%)	5 (5.6%)	0 (0%)
Construction operations on site	7 (7.8%)	46 (51.1%)	31 (34.4%)	6 (6.7%)	0 (0%)
Duration	3 (3.3%)	49 (54.4%)	29 (32.2%)	9 (10%)	0 (0%)
Price	4 (4.9%)	45 (55.6%)	21 (25.9%)	11 (13.6%)	0 (0%)
Quality	8 (8.9%)	50 (55.6%)	22 (24.4%)	8 (8.9%)	2 (2.2%)
Design of construction buildings and other facilities	12 (13.6%)	60 (68.2%)	12 (13.6%)	4 (4.5%)	0 (0%)
Way project teams relate with each other	4 (4.4%)	51 (56.7%)	30 (33.3%)	5 (5.6%)	0 (0%)
How contractors relate with other stakeholders	4 (4.5%)	49 (55.1%)	28 (31.5%)	7 (7.9%)	1 (1.1%)
More dispute	3 (3.4%)	21 (23.9%)	36 (40.9%)	26 (29.5)	2 (2.3%)
Lesser dispute	1 (1.1%)	37 (41.1%)	43 (47.8%)	9 (10%)	0 (0%)
Way construction disputes or issues are resolved	1 (1.1%)	52 (57.8%)	29 (32.2%)	8 (8.9%)	0 (0%)
Conditions of contract used	1 (1.1%)	45 (50%)	36 (40%)	8 (8.9%)	0 (0%)
Overall project management	2 (2.3%)	45 (51.1%)	36 (40.9%)	5 (5.7%)	0 (0%)
The use of team leadership	2 (2.2%)	49 (54.4%)	25 (27.8%)	14 (15.6%)	0 (0%)
Project success	2 (2.2%)	23 (25.8%)	25 (28.1%)	27 (30.3%)	12 (13.5)
Why?					

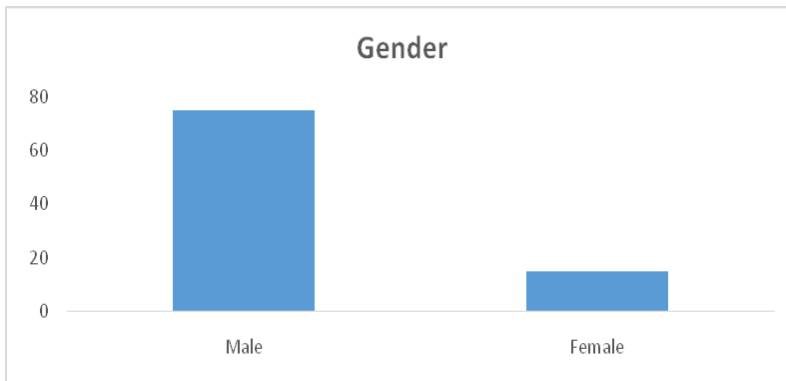
❖ Appendix C



DEMOGRAPHIC & GENERAL INFORMATION

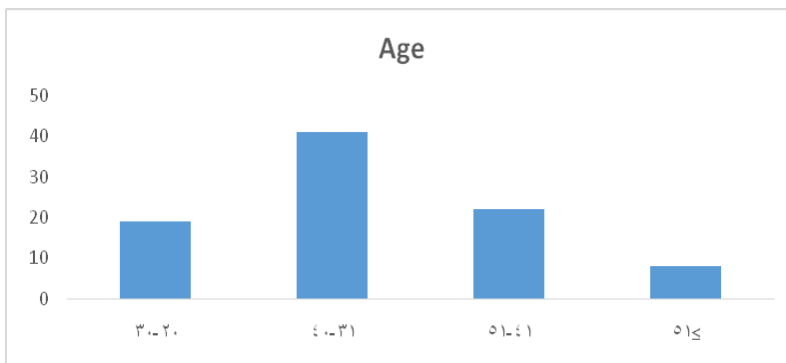
1. Your gender.....:

Male	Female
75	15



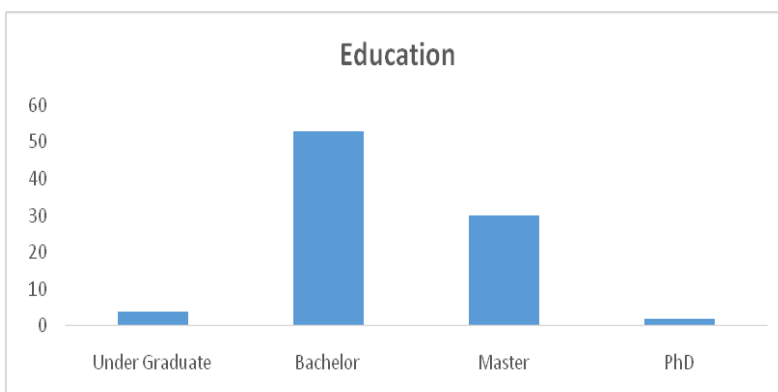
2. Your age.....

20-30	31-40	41-51	≥51
19	41	22	8



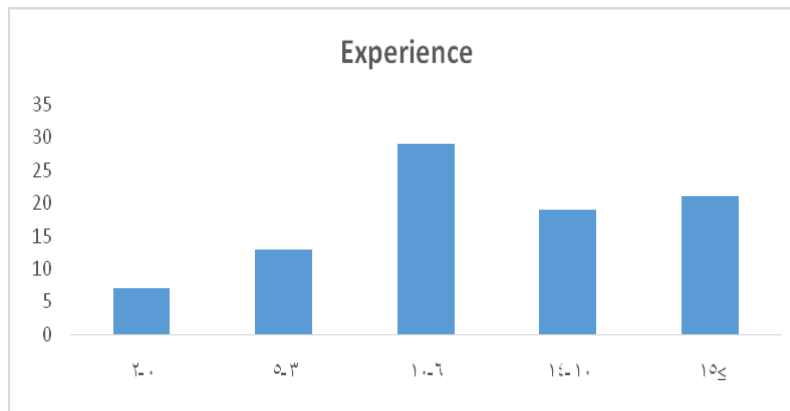
3. Your educational level.....:

Under Graduate	Bachelor	Master	PhD
4	53	30	2



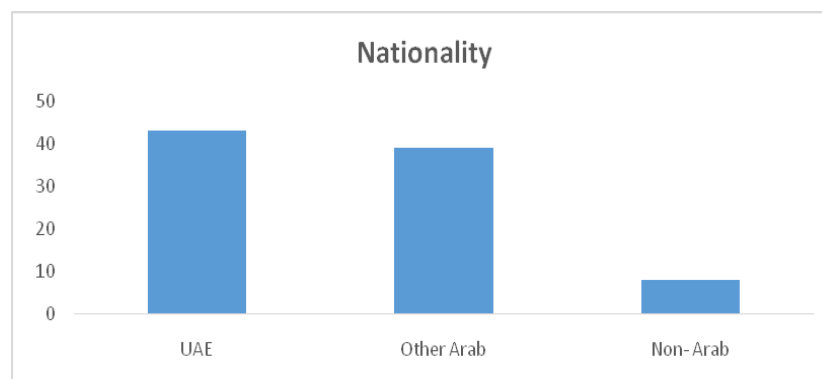
4. Your length of construction experience in the UAE is

0-2	3-5	6-10	10-14	≥15
7	13	29	19	21



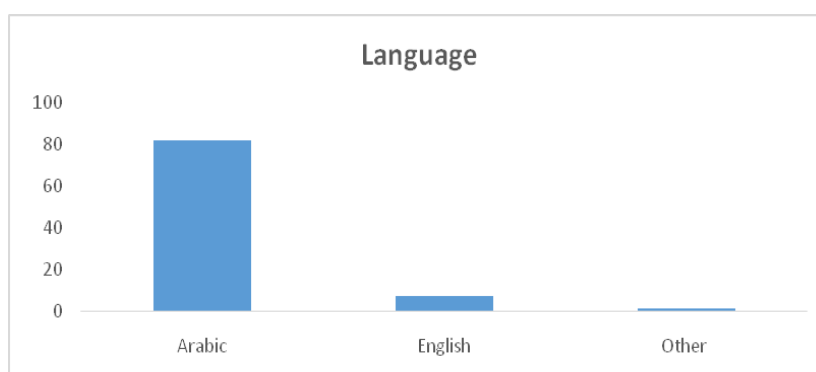
5. Your nationality is

UAE	Other Arab	Non- Arab
43	39	8



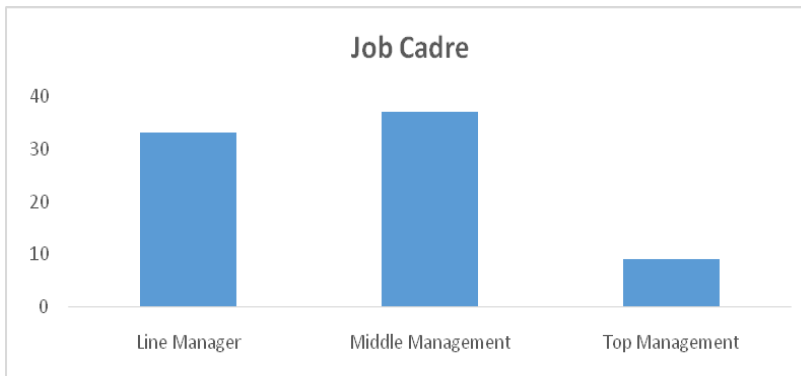
7. Your spoken language(s).....:

Arabic	English	Other
82	7	1



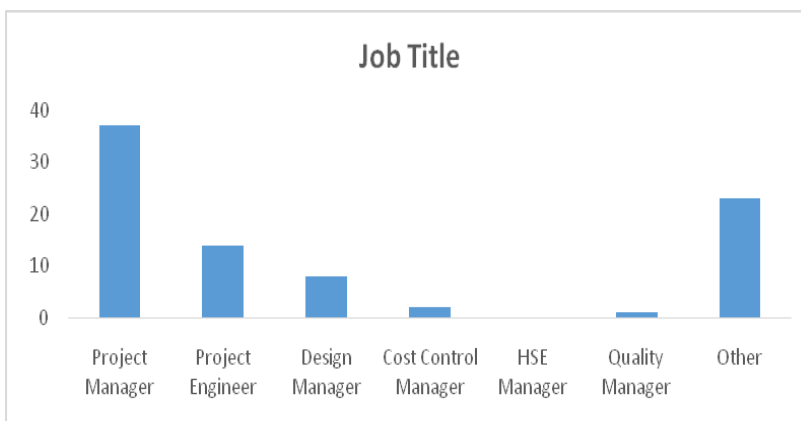
8. Your Job cadre.....:

Line Manager	Middle Management	Top Management
33	37	9



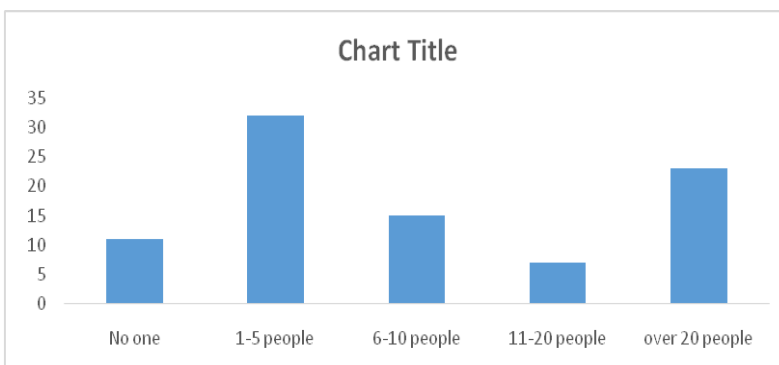
9. Your Job Title

Project Manager	Project Engineer	Design Manager	Cost Control Manager	HSE Manager	Quality Manager	Other
37	14	8	2	0	1	23



10. In a construction project; you provide leadership to;

No one	1-5 people	6-10 people	11-20 people	over 20 people
11	32	15	7	23



11. In construction; you have been a leader for;

0-2 years	3-5 years	6-14 years	≥15 years
26	25	19	18



12- Please rate the success of your leadership; where applicable:

Not sure	Not successful	Adequate	Good	Excellent
4	0	10	60	13

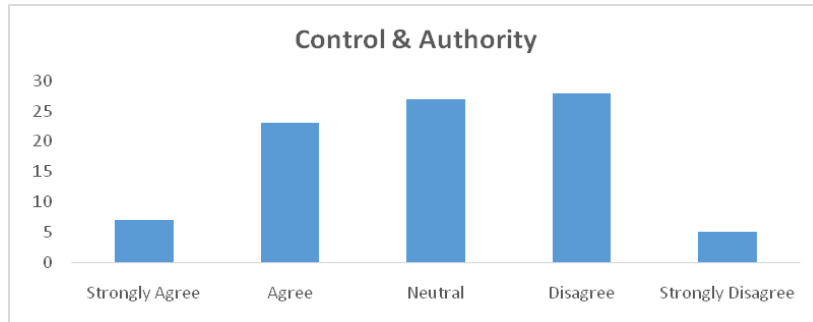


Part-2
LEADERSHIP STYLE

E- Leadership Style 1 :(Autocratic or Authoritarian)

7. I like to keep total control and authority with me

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
7	23	27	28	5

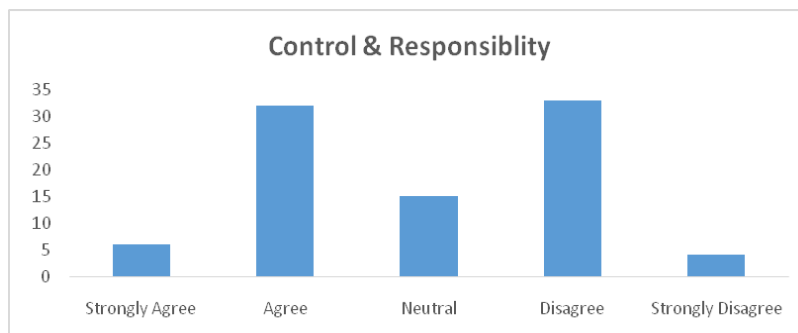


Total = (90) respondents

(33.3%)of the respondents agreed to this questions.(30%)were Neutral and (36.7%) disagreed. Overall most people disagreed to the question.

8. I like to make Project related decisions, myself

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2	26	32	28	2

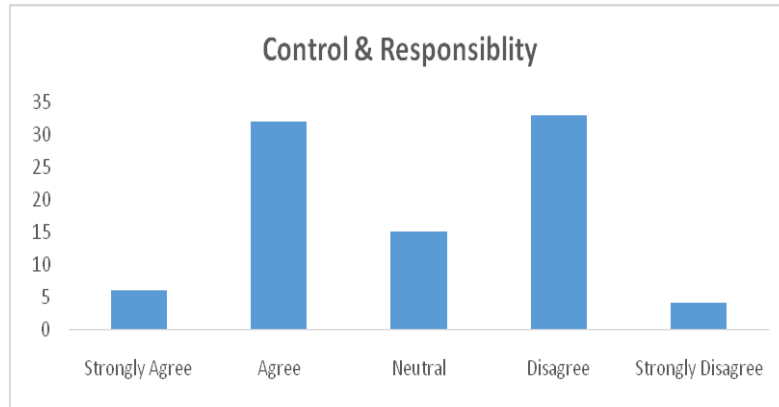


Total = (90) respondents

(31.1%)of the respondents agreed to this questions.(35.6%)were Neutral and (33.3%) disagreed. Overall most people neutrally to the question

9. Concerning projects, I like to keep total control and responsibility with me

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
6	32	15	33	4

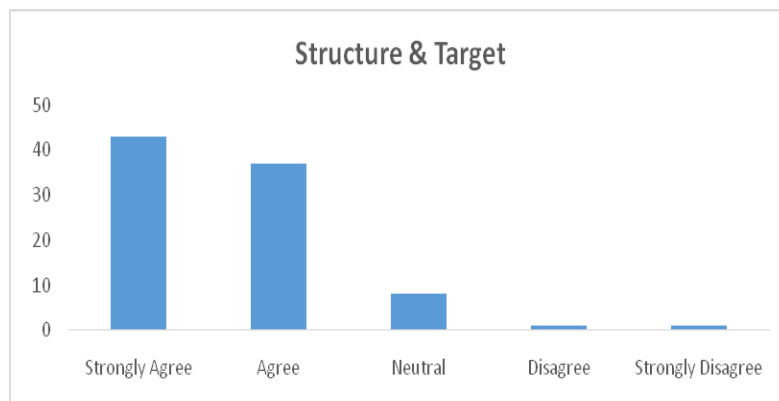


Total = (90) respondents

(42.2%)of the respondents agreed to this questions.(16.7%)were Neutral and (41.1%) disagreed. Overall most people agreed to the question.

10. I always I like to have a clear structure and fixed targets

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
43	37	8	1	1

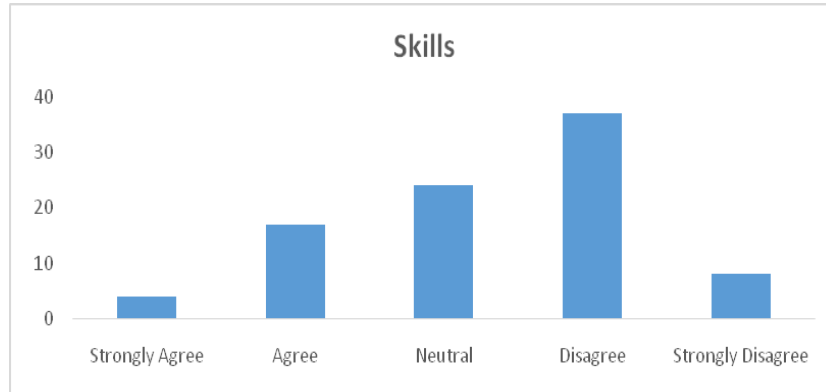


Total = (90) respondents

(88.9%)of the respondents agreed to this questions.(8.9%)were Neutral and (2.2%) agreed. Overall most people agreed to the question

11. Me and my staff have sufficient skills to execute our projects; and have no need of further training

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4	17	24	37	8

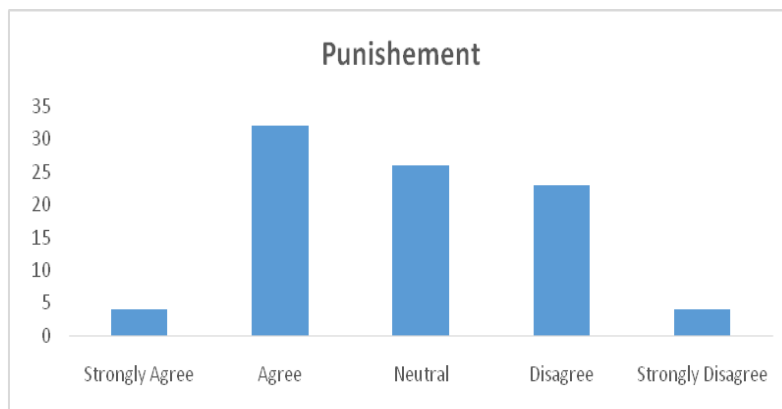


Total = (90) respondents

(23.3%)of the respondents agreed to this questions.(26.7%)were Neutral and (50%) agreed. Overall most people disagreed to the question.

12. When Workers are not performing well, they must be punished

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4	32	26	23	4



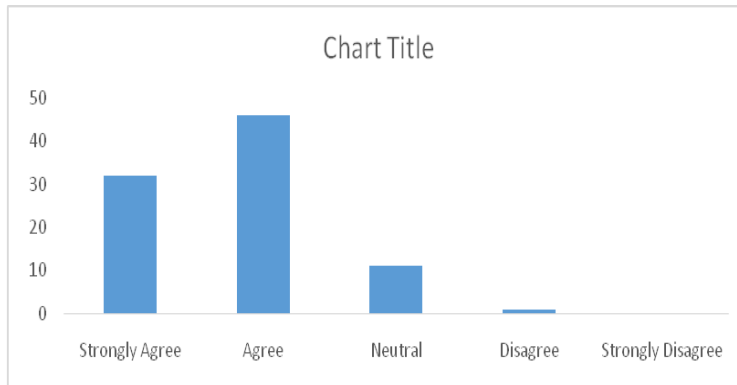
Total = (89) respondents

(40.4%)of the respondents agreed to this questions.(29.2%)were Neutral and (30.3%) agreed. Overall most people agreed to the question

F- Leadership Style 2(Bureaucratic)

6. I like rules and regulations to be followed strictly

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
32	46	11	1	0

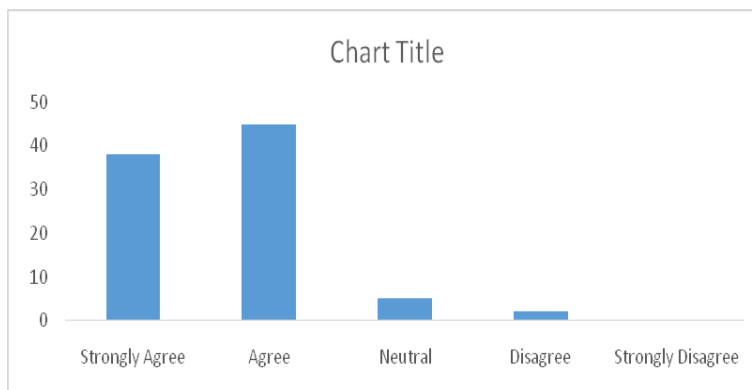


Total = (90) respondents

(86.7%)of the respondents agreed to this questions.(12.2%)were Neutral and (1.1%)
agreed. Overall most people agreed to the question.

7. I like to have full authority related to my position on the project

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
38	45	5	2	0

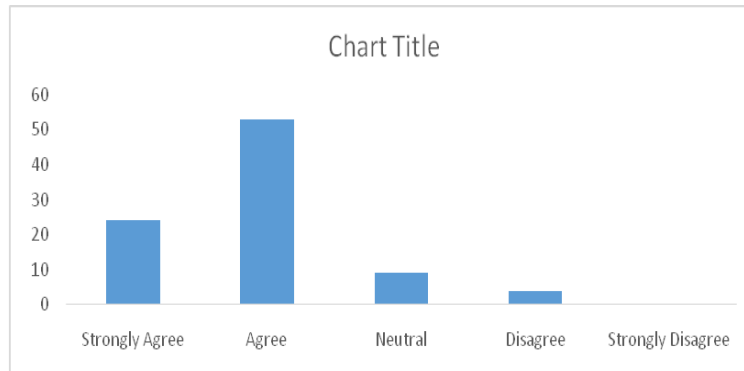


Total = (90) respondents

(92.2%) of the respondents agreed to this questions. (5.6%)were Neutral and (2.2%)
agreed. Overall most people agreed to the question

8. I focus on control and consistent outputs

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
24	53	9	4	0

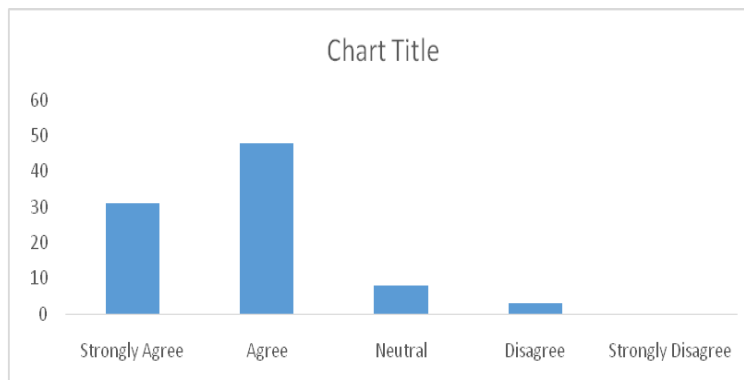


Total = (90) respondents

(85.6%)of the respondents agreed to this questions.(10%)were Neutral and (4.4%) agreed. Overall most people agreed to the question.

9. Following the rules and regulations is one of my priorities

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
31	48	8	3	0



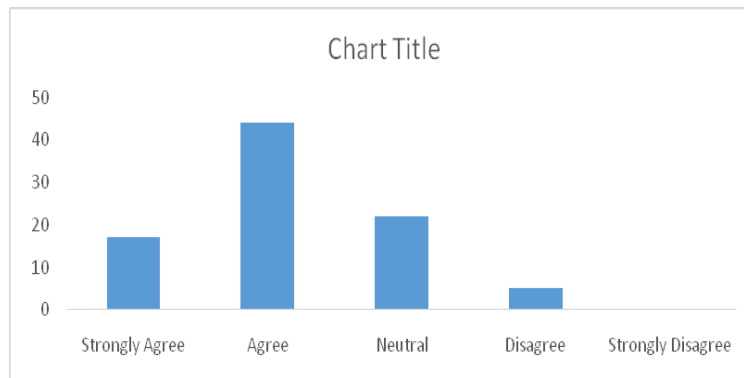
Total = (90) respondents

(87.8%)of the respondents agreed to this questions.(8.9%)were Neutral and (3.3%) agreed.

Overall most people agreed to the question

10. I reward workers based on their ability to follow the rules

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
17	44	22	5	0



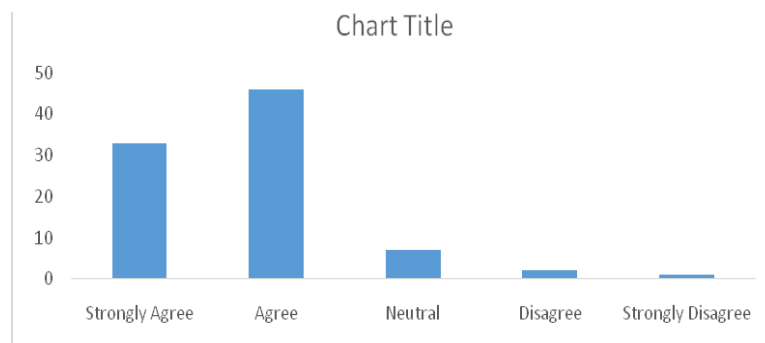
Total = (88) respondents

(69.3%)of the respondents agreed to this questions.(25%)were Neutral and (5.7%) agreed. Overall most people agreed to the question

G- Leadership Style 3:(Democratic pr Participative)

7. I like to share the decision making responsibility with my team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
33	46	7	2	1

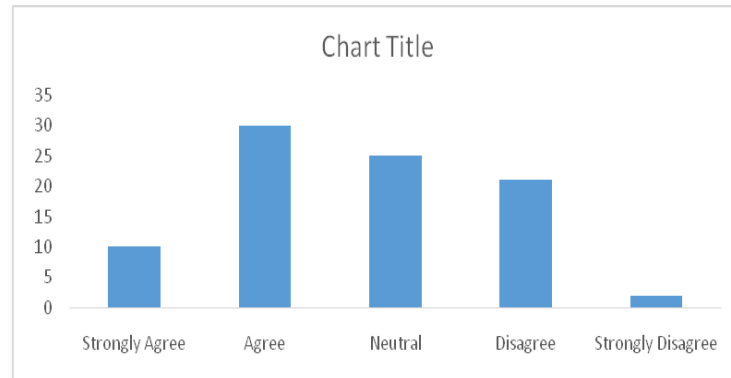


Total = (89) respondents

(88.8%)of the respondents agreed to this questions.(7.9%)were Neutral and (3.4%) agreed. Overall most people agreed to the question.

8. I like to share the decision making responsibility with only my creative team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
10	30	25	21	2

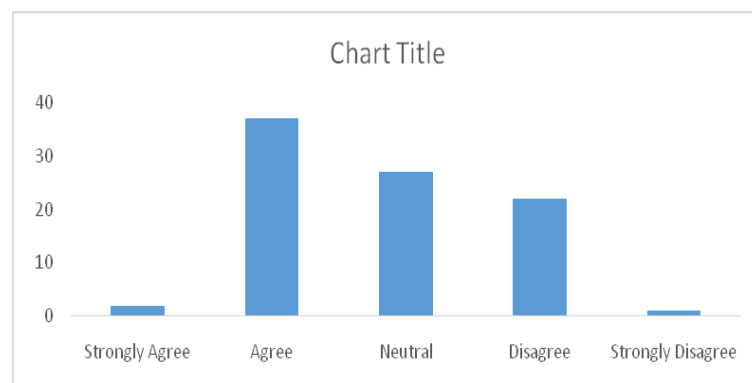


Total = (88) respondents

(45.5%) of the respondents agreed to this question. (28.4%) were Neutral and (26.1%) disagreed. Overall most people agreed to the question

9. I focus on authority and limited control

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2	37	27	22	1

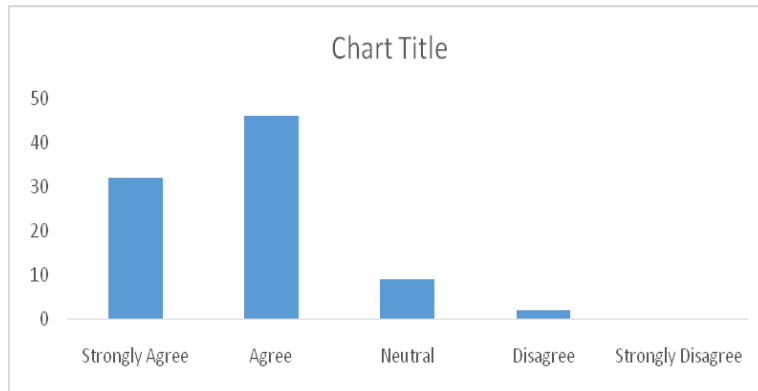


Total = (89) respondents

(43.8%) of the respondents agreed to this question. (30.3%) were Neutral and (25.8%) disagreed. Overall most people agreed to the question.

10. I like to have feedback from all team members on decisions made

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
32	46	9	2	0

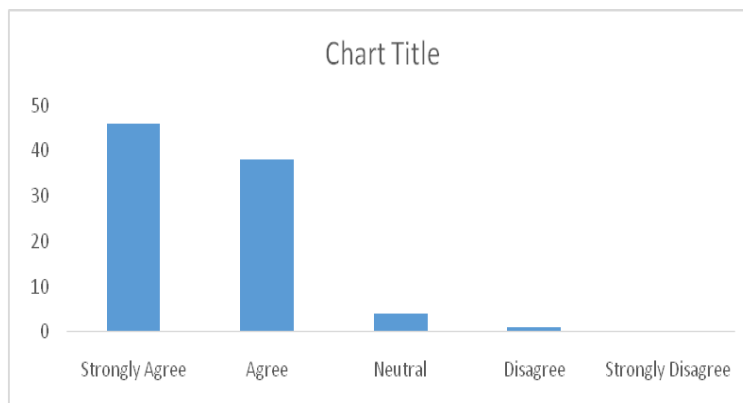


Total = (89) respondents

(87.6%)of the respondents agreed to this questions.(10.1%)were Neutral and (2.2%) agreed. Overall most people agreed to the question

11. The development of my team members is one of my priorities

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
46	38	4	1	0

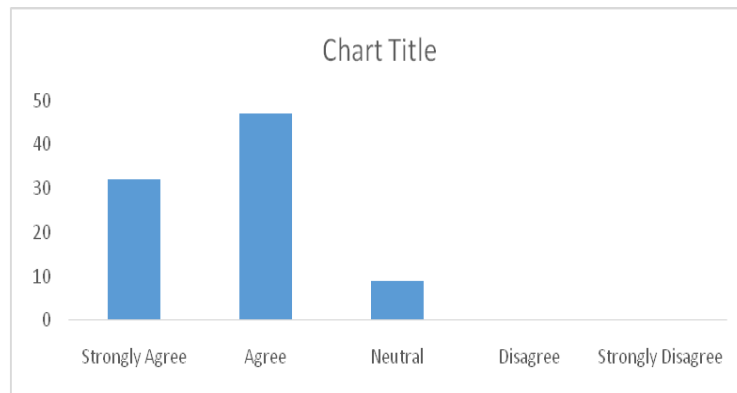


Total = (89) respondents

(94.4%)of the respondents agreed to this questions.(4.5%)were Neutral and (1.1%) agreed. Overall most people agreed to the question.

12. I like to share credit or incentives with all team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
32	47	9	0	0



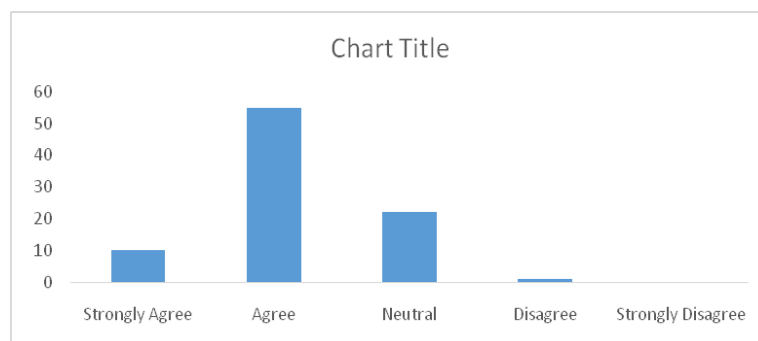
Total = (88) respondents

(89.8%) of the respondents agreed to this questions.(10.2%)were Neutral and (0%) agreed. Overall most people agreed to the question

H- Leadership Style 4 (Charismatic)

6. I have special qualities to inspire team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
10	55	22	1	0

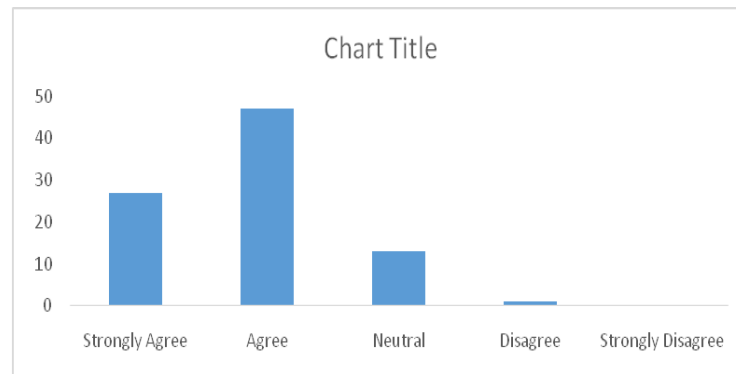


Total = (88) respondents

(73.9%) of the respondents agreed to this questions.(25%)were Neutral and (1.1%) agreed. Overall most people agreed to the question.

7. I like to promote the vision and mission of the organization throughout a project

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
27	47	13	1	0

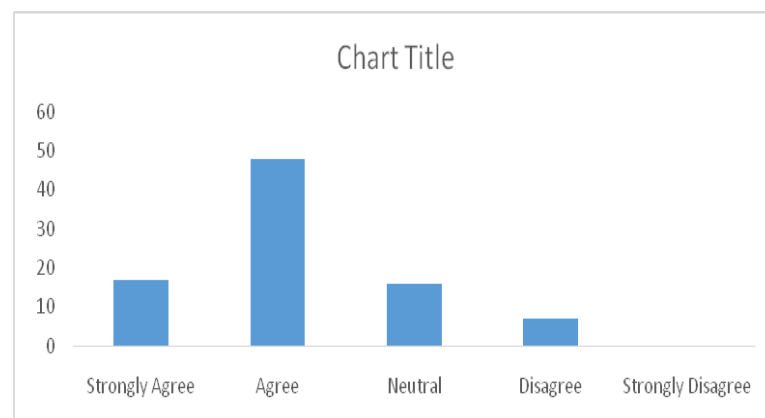


Total = (88) respondents

(84.1%) of the respondents agreed to this question. (14.8%) were Neutral and (1.1%) disagreed. Overall most people agreed to the question

8-I like to develop a personal relationship with members of the project team

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
17	48	16	7	0

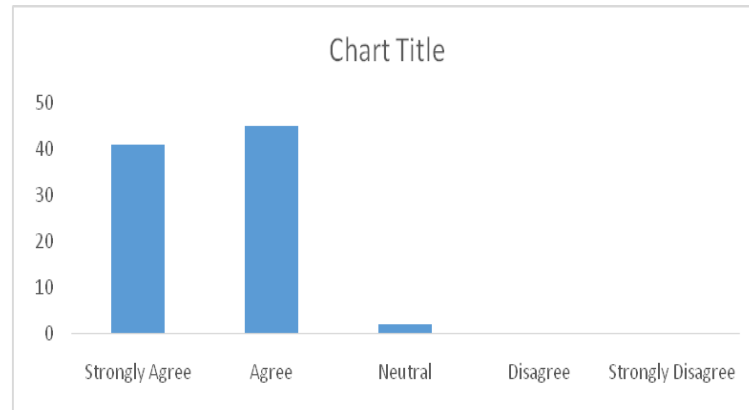


Total = (88) respondents

(73.9%) of the respondents agreed to this question. (18.2%) were Neutral and (8%) disagreed. Overall most people agreed to the question.

9- I like to develop the skills of each member of the project team

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
41	45	2	0	0

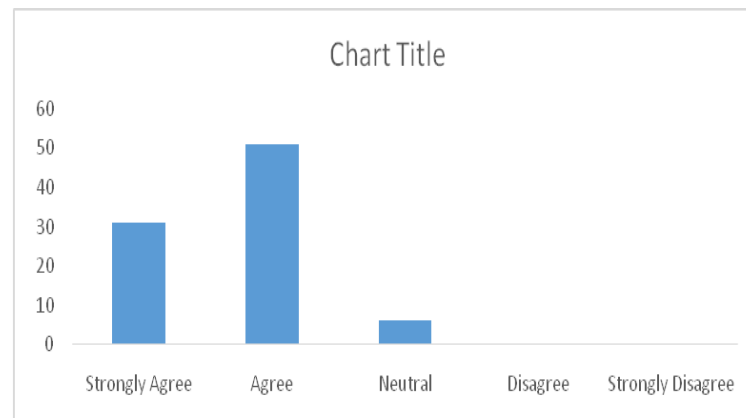


Total = (88) respondents

(97.7%)of the respondents agreed to this questions.(2.3%)were Neutral and (0%) agreed. Overall most people agreed to the question

10- I keenly address the cares and needs of team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
31	51	6	0	0



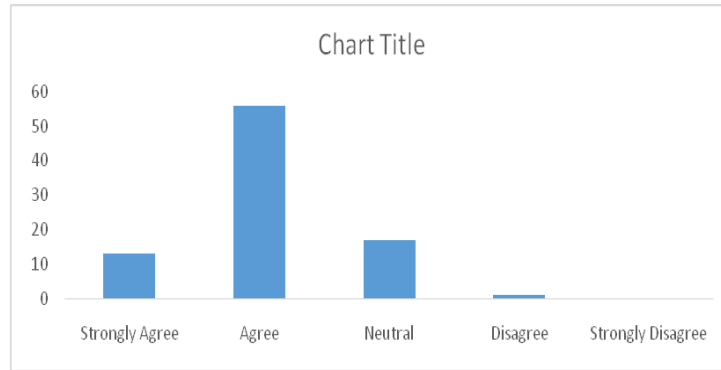
Total = (88) respondents

(93.2%)of the respondents agreed to this questions.(6.8%)were Neutral and (0%) agreed. Overall most people agreed to the question

I-Leadership Style 5:(The Laissez Faire (Delegative))

1-I delegate authority to talented, capable and entrusted team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
13	56	17	1	0

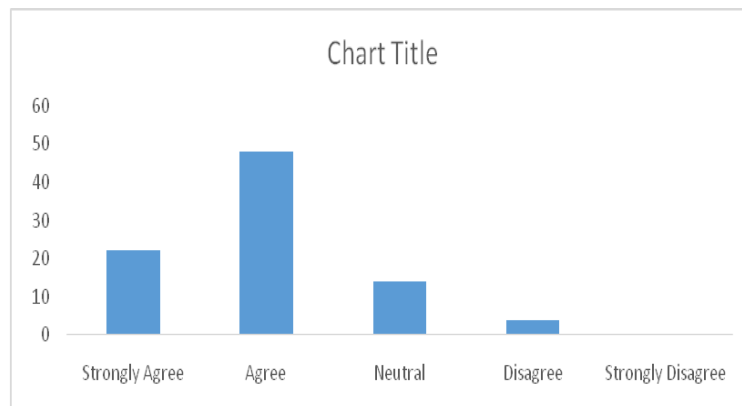


Total = (87) respondents

(79.3%)of the respondents agreed to this questions.(19.5%)were Neutral and (1.1%) disagreed. Overall most people agreed to the question.

2-I like to delegate tasks to talented and entrusted employees

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
22	48	14	4	0

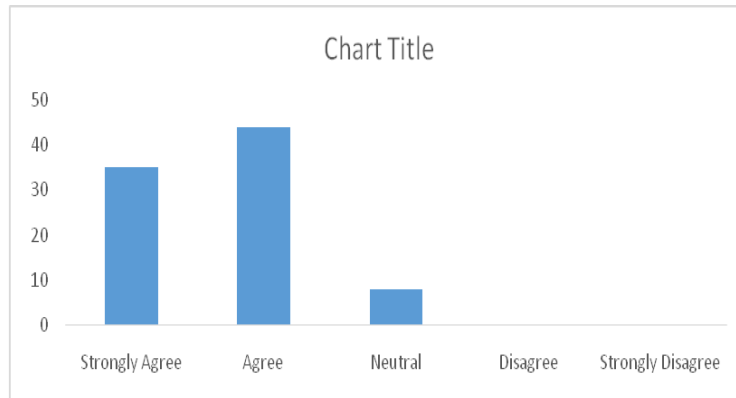


Total = (88) respondents

(79.5%)of the respondents agreed to this questions.(15.9%)were Neutral and (4.5%) disagreed. Overall most people agreed to the question

3-I focus on trust and confidence building among team members

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
35	44	8	0	0

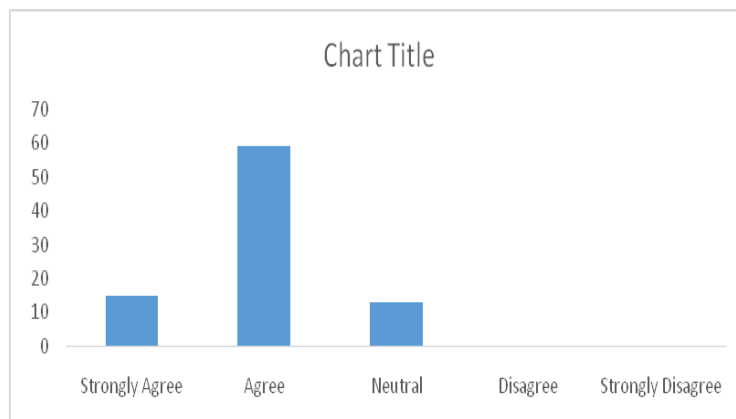


Total = (87) respondents

(90.8%)of the respondents agreed to this questions.(9.2%)were Neutral and (0%) agreed. Overall most people agreed to the question.

4-I like to manage people who manage the job

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
15	59	13	0	0

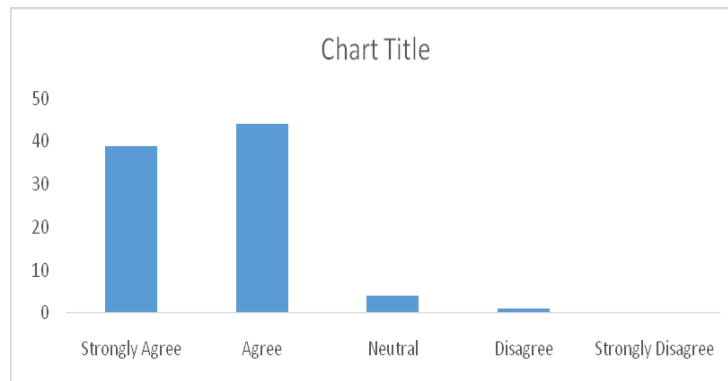


Total = (87) respondents

(85.1%)of the respondents agreed to this questions.(14.9%)were Neutral and (0%) agreed. Overall most people agreed to the question

5-I like to reward team members according to their performance

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
39	44	4	1	0

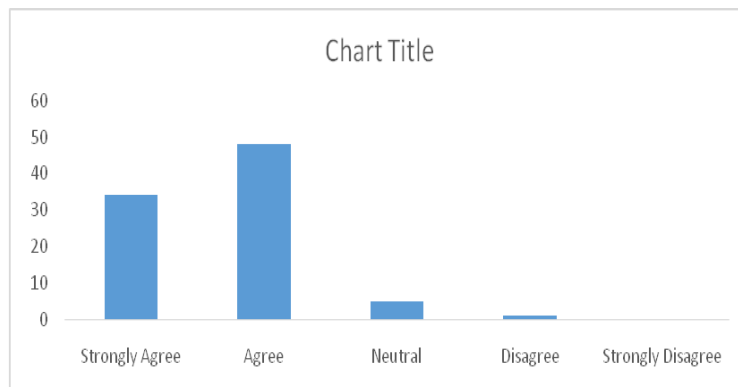


Total = (88) respondents

(94.3%) of the respondents agreed to this question. (4.5%) were Neutral and (1.1%) disagreed. Overall most people agreed to the question.

6-I like to reward team members according to the results they are achieving

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
34	48	5	1	0



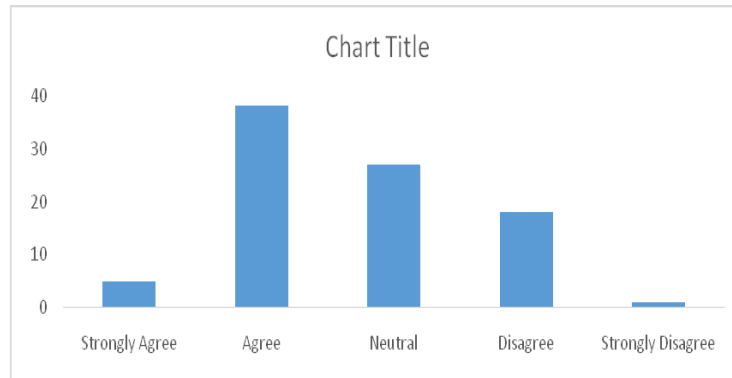
Total = (88) respondents

(93.2%) of the respondents agreed to this question. (5.7%) were Neutral and (1.1%) disagreed. Overall most people agreed to the question

G-Leadership Style 6:(The Paternalistic)

1-I consider my team members as my children

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	38	27	18	1

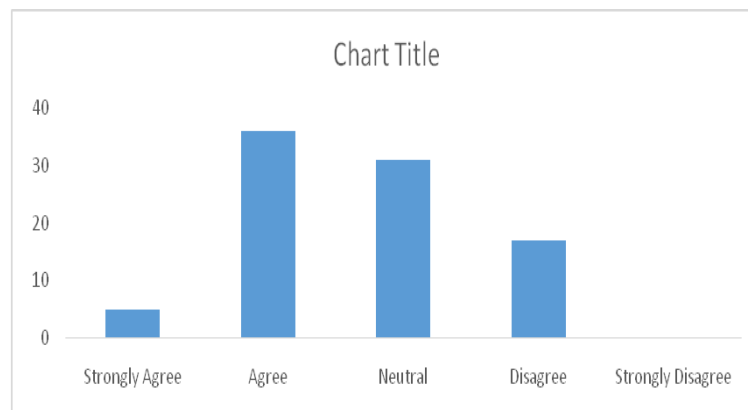


Total = (89) respondents

(48.3%)of the respondents agreed to this questions.(30.3%)were Neutral and (21.3%) agreed. Overall most people agreed to the question.

2-I like to act as a father to all my employees

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	36	31	17	0

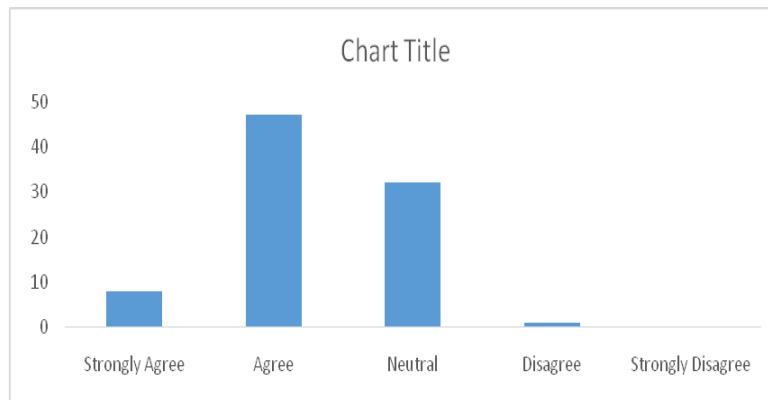


Total = (89) respondents

(46.1%)of the respondents agreed to this questions.(34.8%)were Neutral and (19.1%) agreed. Overall most people agreed to the question

3-I focus on regulating the conduct of team members towards me

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
8	47	32	1	0

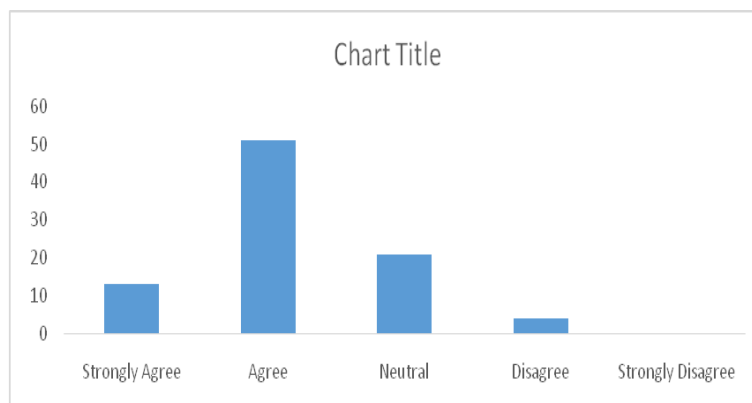


Total = (88) respondents

(62.5%) of the respondents agreed to this question. (36.4%) were Neutral and (1.1%) disagreed. Overall most people agreed to the question.

4-I focus on regulating the conduct of team members towards each other

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
13	51	21	4	0

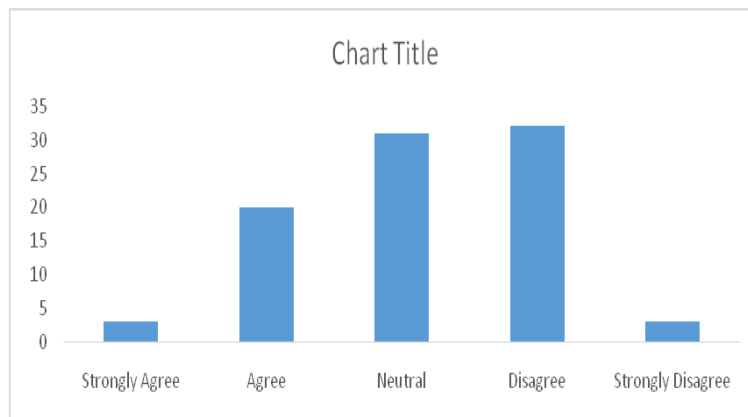


Total = (89) respondents

(71.9%) of the respondents agreed to this question. (23.6%) were Neutral and (4.5%) disagreed. Overall most people agreed to the question.

5-I like to consult my team members before making a decision

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3	20	31	32	3

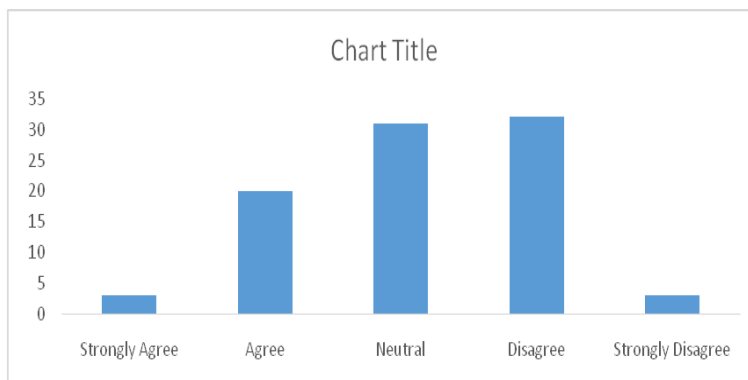


Total = (89) respondents

(88.8%)of the respondents agreed to this questions.(10.1%)were Neutral and (1.1%) agreed. Overall most people agreed to the question.

6-I like to use power to control and , - punish subordinates

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3	20	31	32	3

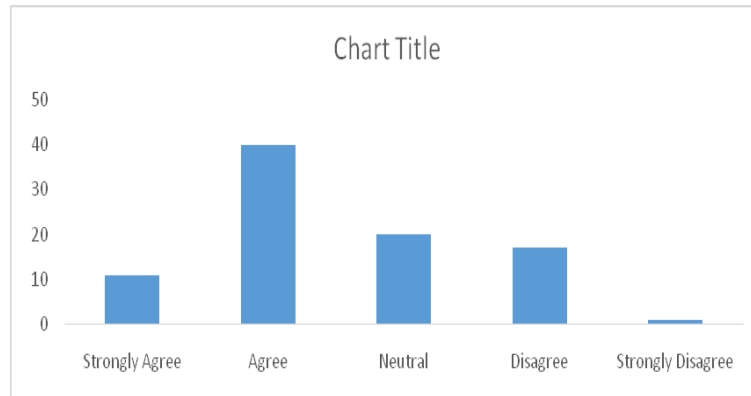


Total = (89) respondents

(25.8%)of the respondents agreed to this questions.(34.8%)were Neutral and (39.3%) agreed. Overall most people disagreed to the question

7-I like to use power to protect and reward subordinates

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
11	40	20	17	1

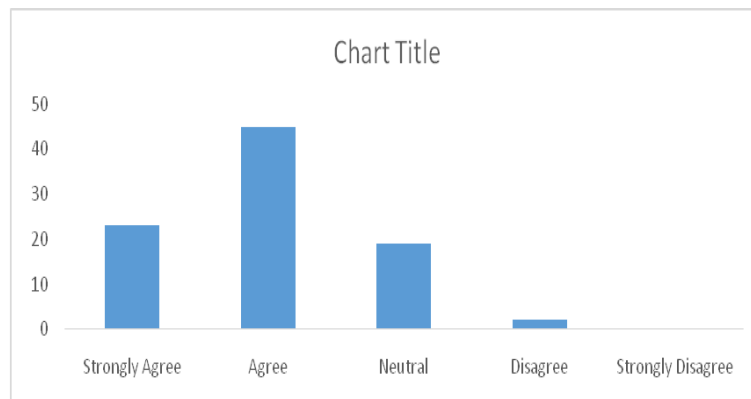


Total = (89) respondents

(57.3%) of the respondents agreed to this questions. (22.5%) were Neutral and (20.2%) disagreed. Overall most people agreed to the question.

8-I am interested in knowing how my workers feel

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
23	45	19	2	0

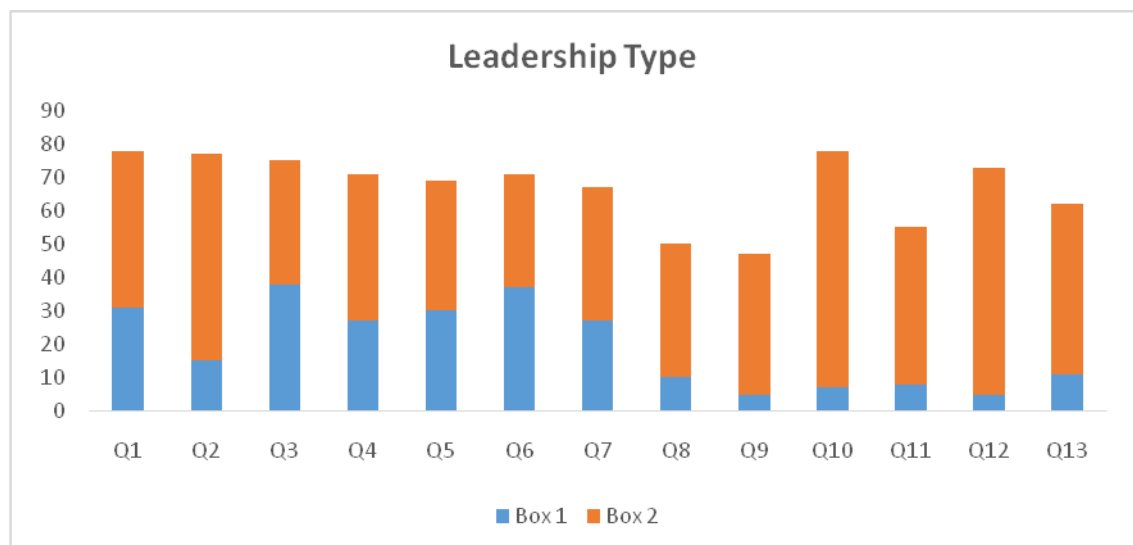


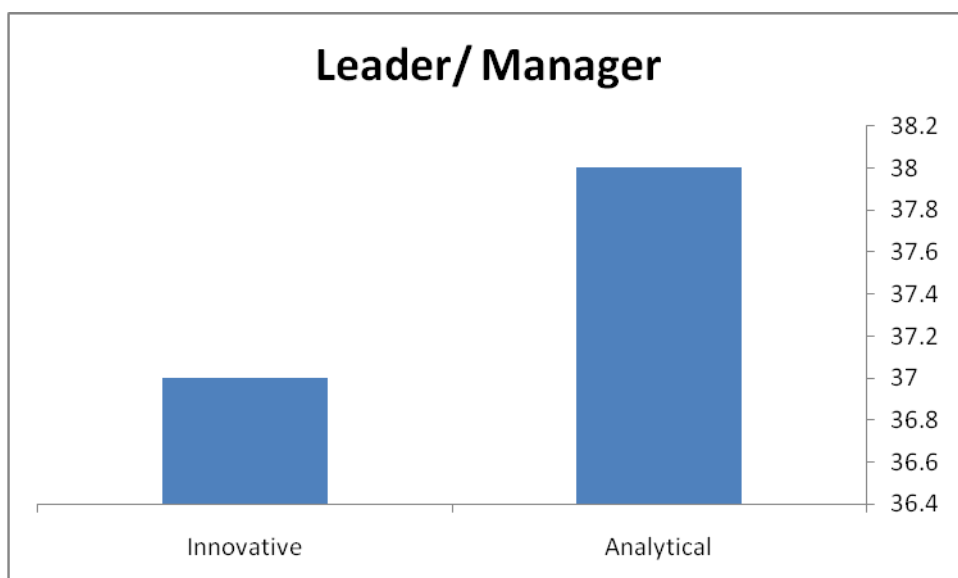
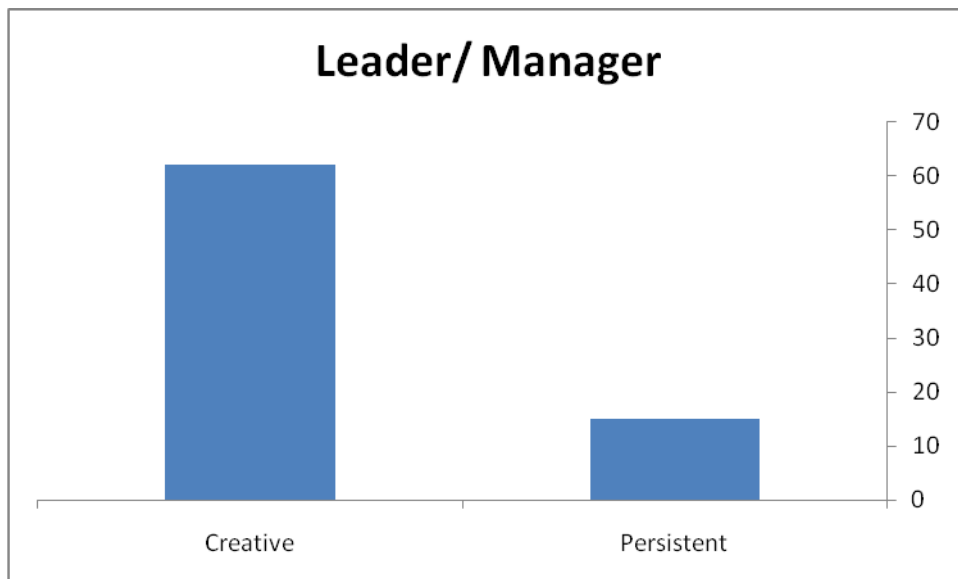
Total = (89) respondents

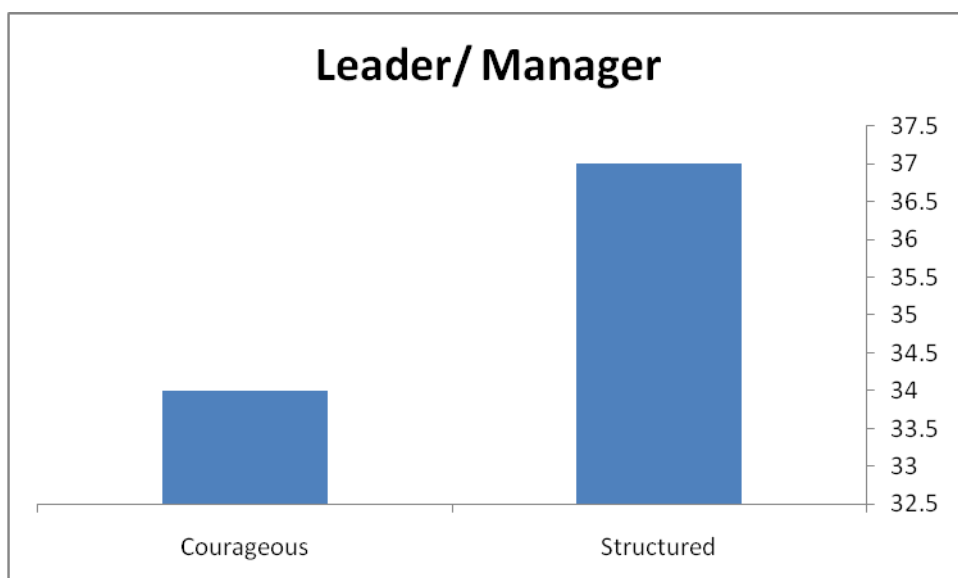
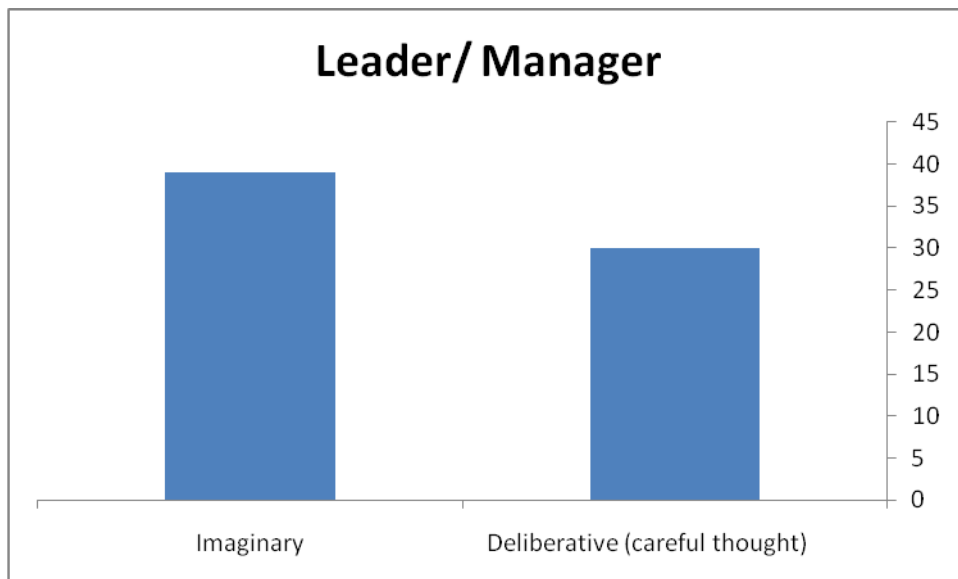
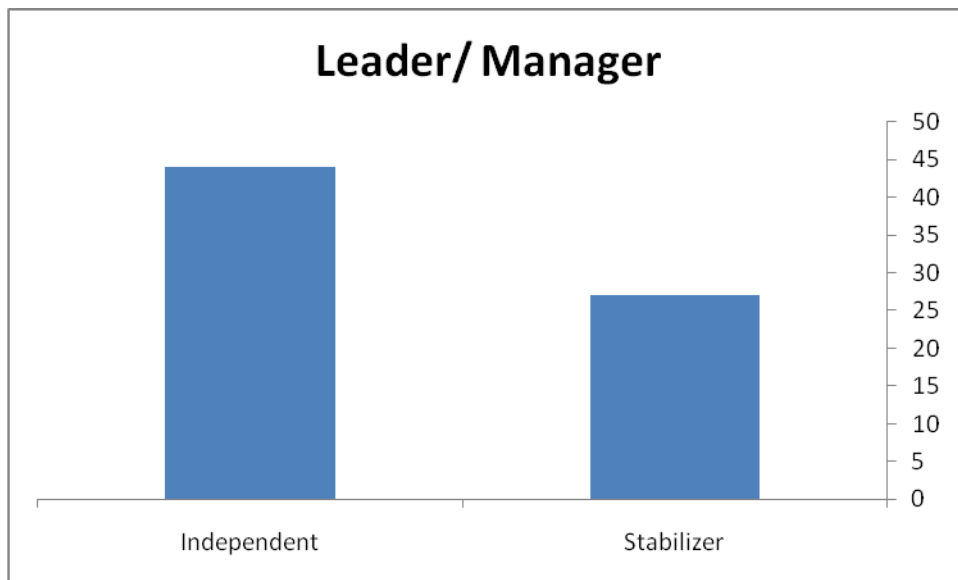
(76.4%) of the respondents agreed to this questions. (21.3%) were Neutral and (2.2%) disagreed. Overall most people agreed to the question

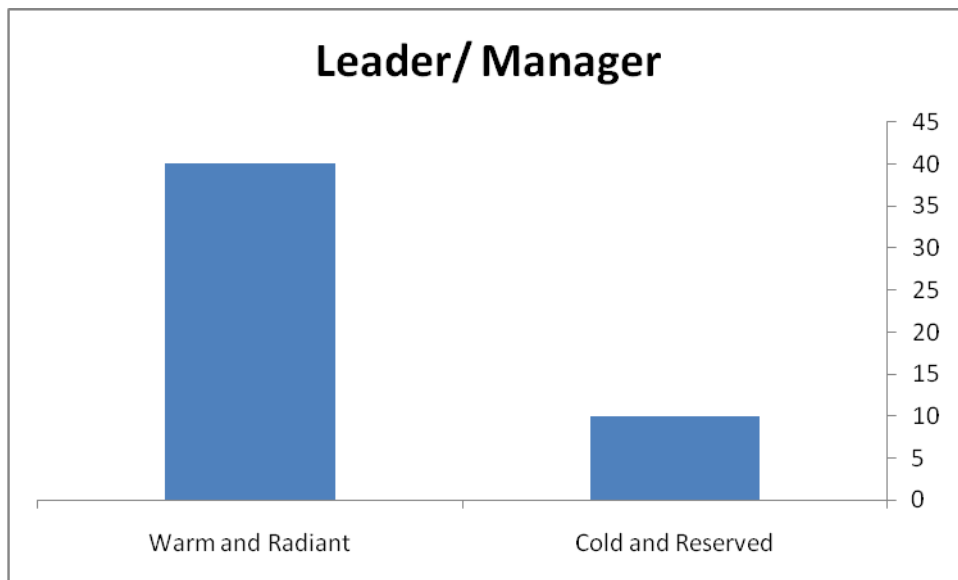
LEADERSHIP TYPE

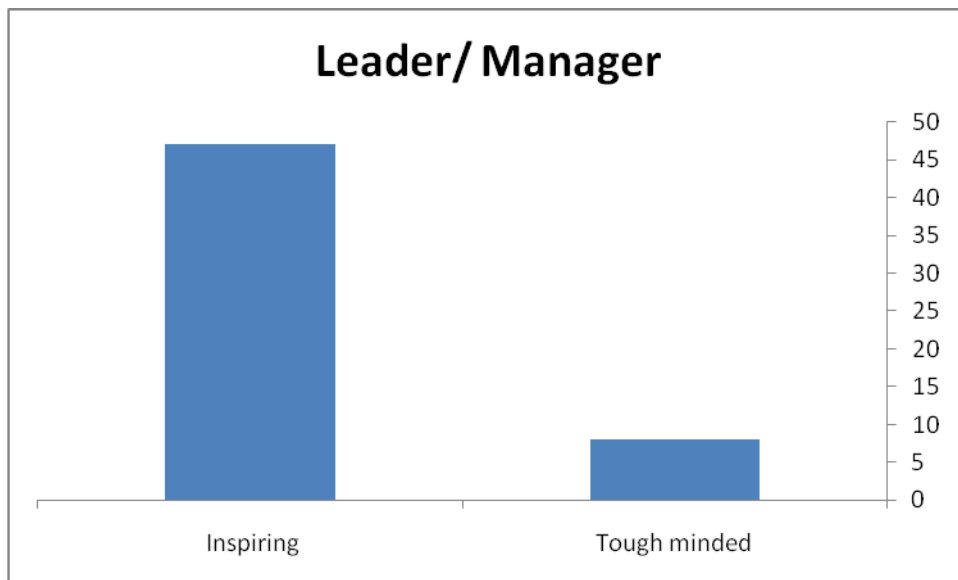
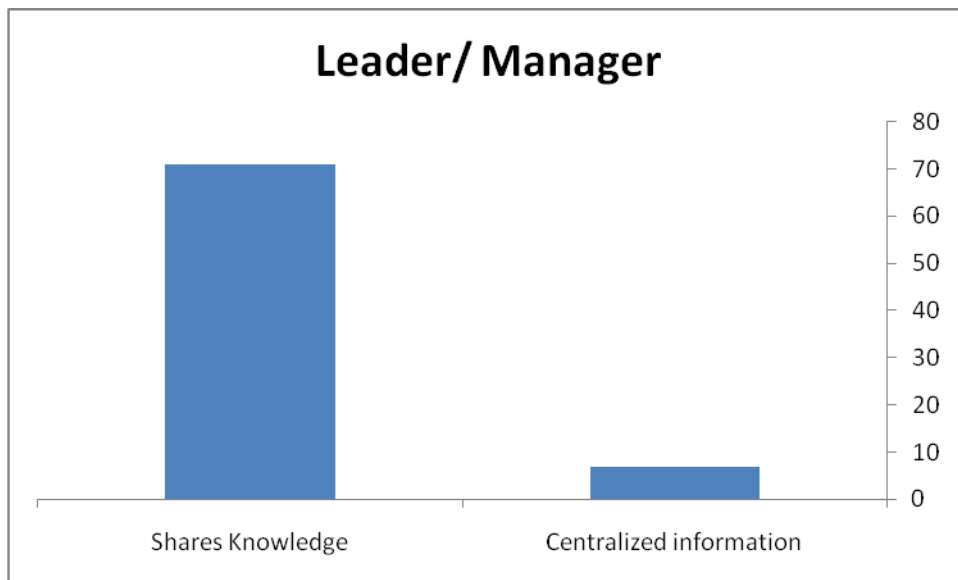
#	Box 1	Box 2	Total
Q1	31	47	78
Q2	15	62	77
Q3	38	37	75
Q4	27	44	71
Q5	30	39	69
Q6	37	34	71
Q7	27	40	67
Q8	10	40	50
Q9	5	42	47
Q10	7	71	78
Q11	8	47	55
Q12	5	68	73
Q13	11	51	62
Total	251	622	

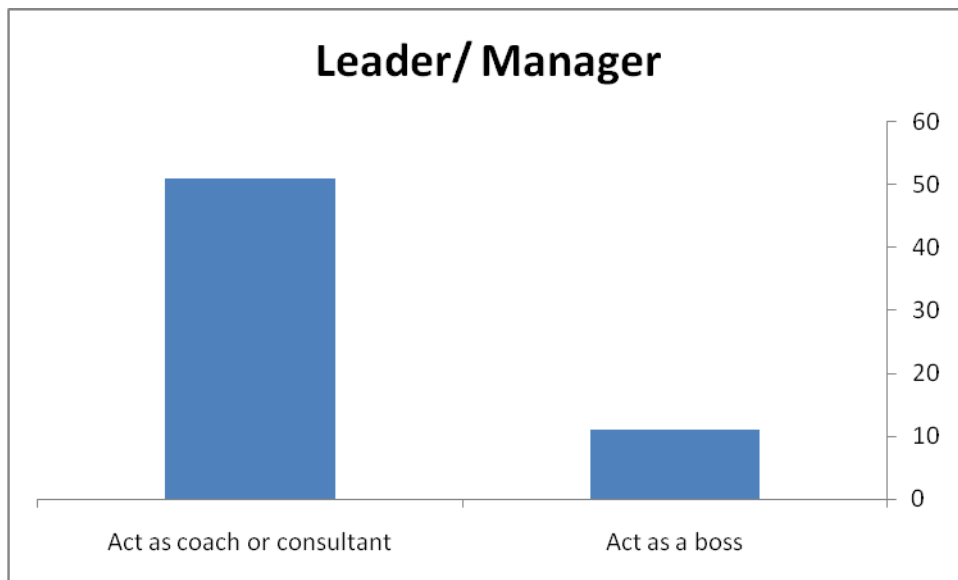










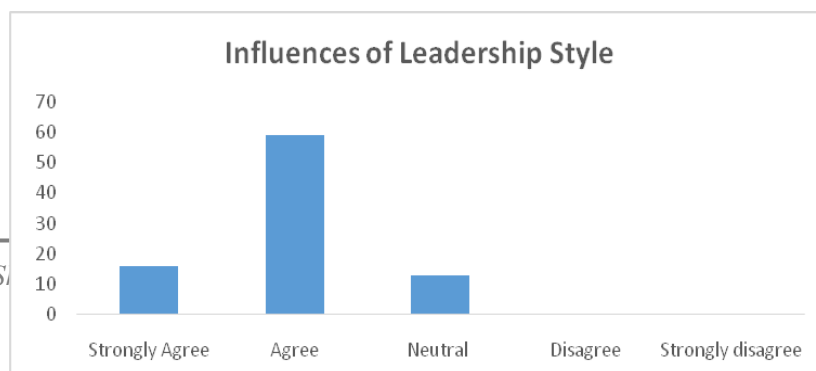


PART#4

IMPACT OF LEADERSHIP ON CONSTRUCTION PROJECT SUCCESS IN THE UAE

1-The leadership styles used in the UAE influence the operations of project managers

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
16	59	13	0	0



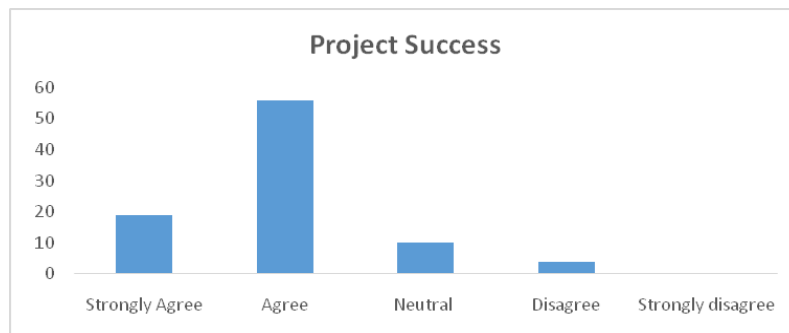
Total = (88) respondents

(85.2%)of the respondents agreed to this questions.

(14.8%)were Neutral and (0%) disagreed. Overall most people agreed to the question.

2-Project success in UAE construction is a direct function of the leadership style used

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
19	56	10	4	0



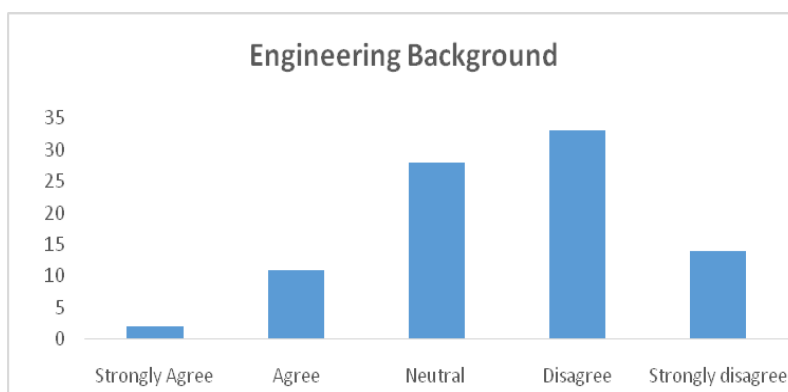
Total = (89) respondents

(84.3%)of the respondents agreed to this questions.

(11.2%)were Neutral and (4.5%) disagreed. Overall most people agreed to the question.

3-A Project Manager with (no) engineering background can equally be successful

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	11	28	33	14



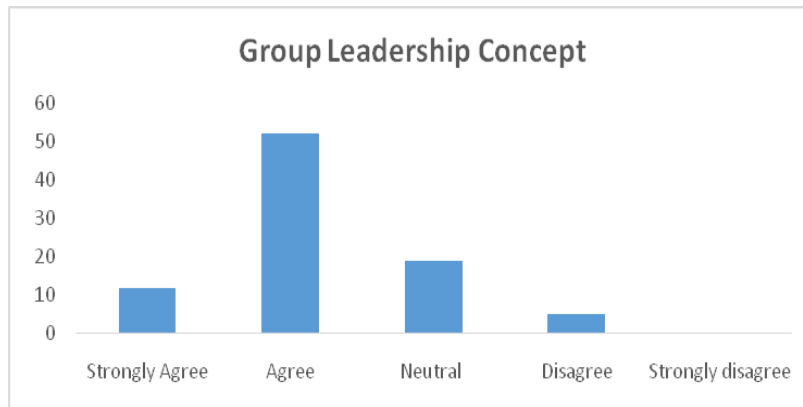
Total = (88) respondents

(14.8%)of the respondents agreed to this questions.

(31.8%)were Neutral and (53.4%) disagreed. Overall most people disagreed to the question.

4-I am familiar with the concept of group leadership in construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
12	52	19	5	0



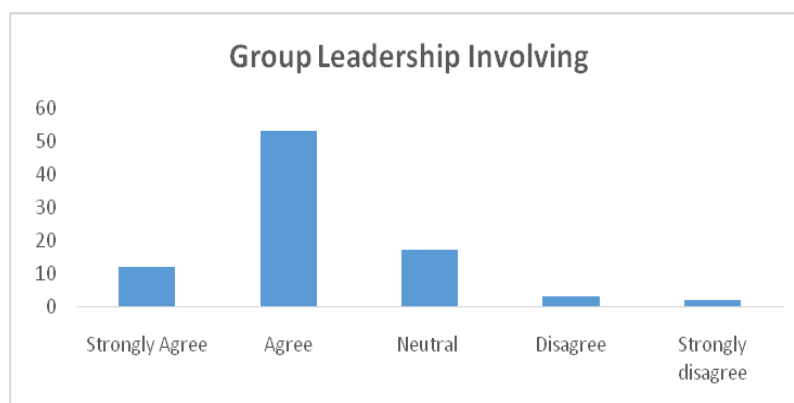
Total = (88) respondents

(72.7%)of the respondents agreed to this questions.

(21.6%)were Neutral and (5.7%) disagreed. Overall most people agreed to the question.

5-I am (or have been) involved with group leadership in construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
12	53	17	3	2



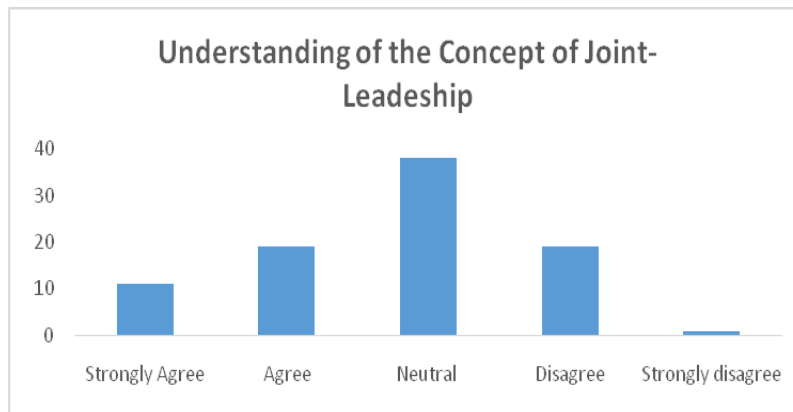
Total = (87) respondents

(74.7%)of the respondents agreed to this questions.

(19.5%)were Neutral and (5.7%) disagreed. Overall most people agreed to the question.

6-The concept of Joint leadership is well understood in the UAE construction sector

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
11	19	38	19	1

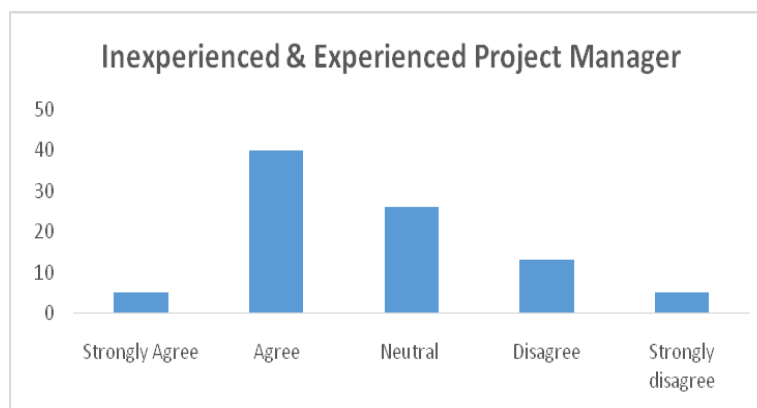


Total = (88) respondents

(34.1%)of the respondents agreed to this questions.(43.2%)were Neutral and (22.7%) disagreed. Overall most people neutrally to the question.

7-In the UAE; an inexperienced individual can jointly lead a project successfully alongside an experienced project manager

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
5	40	26	13	5



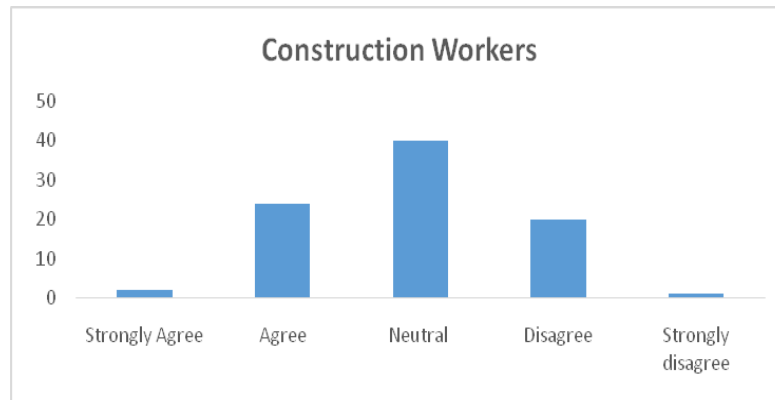
Total = (89) respondents

(50.6%)of the respondents agreed to this questions.

(29.2%)were Neutral and (20.2%) disagreed. Overall most people agreed to the question.

8-Construction workers in the UAE do not like the concept of Joint leadership of projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	24	40	20	1

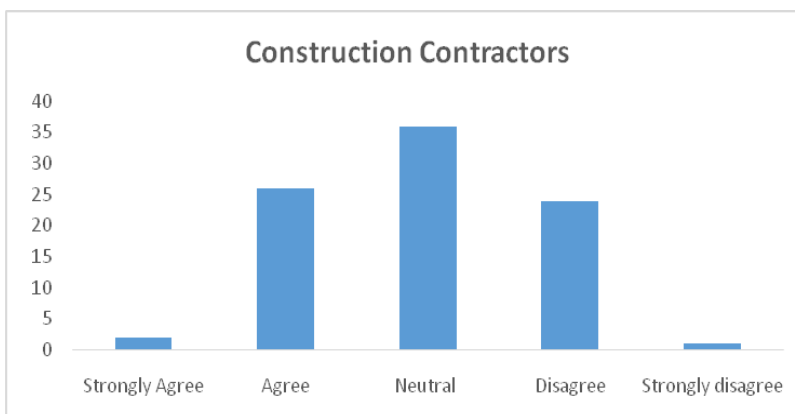


Total = (87) respondents

(29.9.%)of the respondents agreed to this questions.(46%)were Neutral and (24.1%) disagreed. Overall most people neutrally to the question.

9-Construction Contractors in the UAE do not like the concept of Joint leadership of projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	26	36	24	1



Total = (89) respondents

(31.5%)of the respondents agreed to this questions.(40.4%)were Neutral and (28.1%) disagreed. Overall most people neutrally to the question.

10-Suppliers to UAE construction projects do not like the concept of joint project-leadership

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
0	25	40	22	1

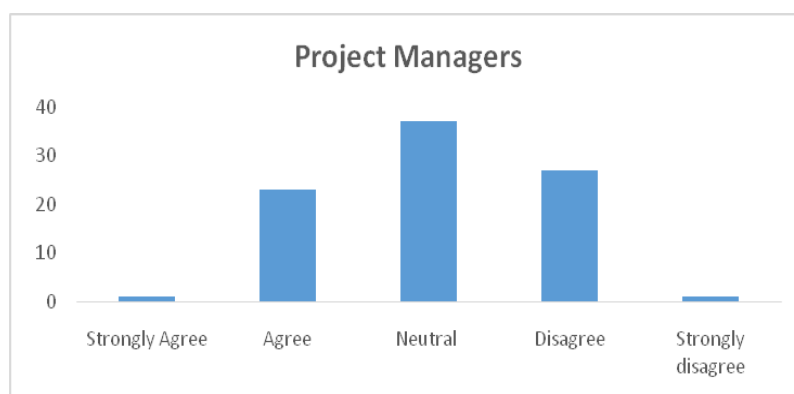


Total = (88) respondents

(28.4%)of the respondents agreed to this questions.(45.5%)were Neutral and (26.1%) disagreed. Overall most people neutrally to the question.

11-Project Managers do not like the concept of Joint leadership in UAE construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1	23	37	27	1

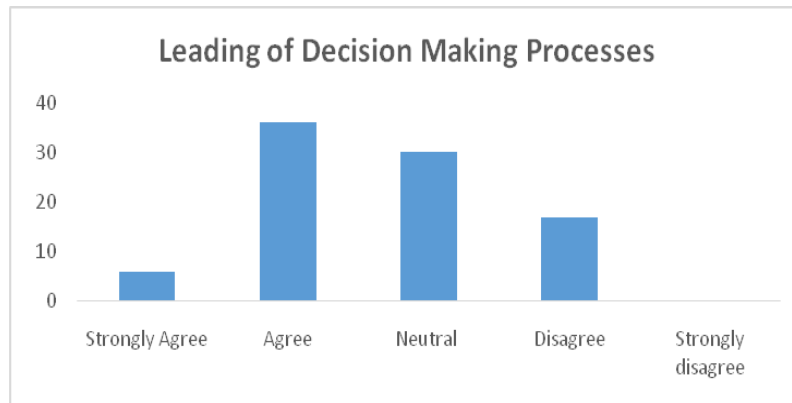


Total = (89) respondents

(27%)of the respondents agreed to this questions.(41.6%)were Neutral and (31.5%) disagreed. Overall most people neutrally to the question.

12-Joint leadership in UAE construction leads to lengthy decision making processes

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
6	36	30	17	0

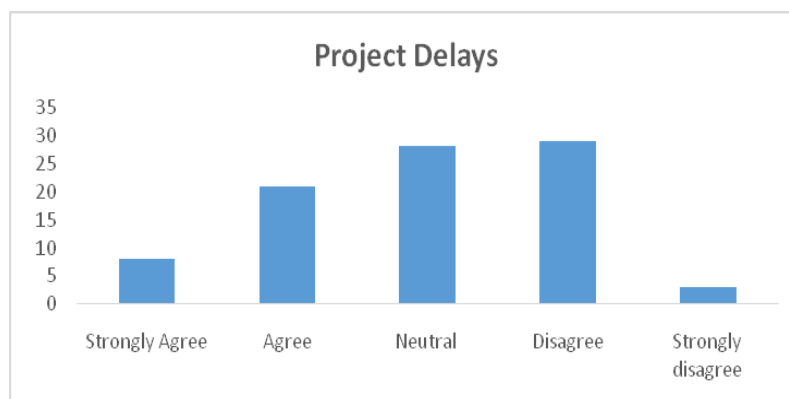


Total = (89) respondents

(47.2%)of the respondents agreed to this questions.(33.7%)were Neutral and (19.1%) disagreed. Overall most people agreed to the question.

13- The concept of joint-Project Managers in UAE construction leads to more project delays

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
8	21	28	29	3

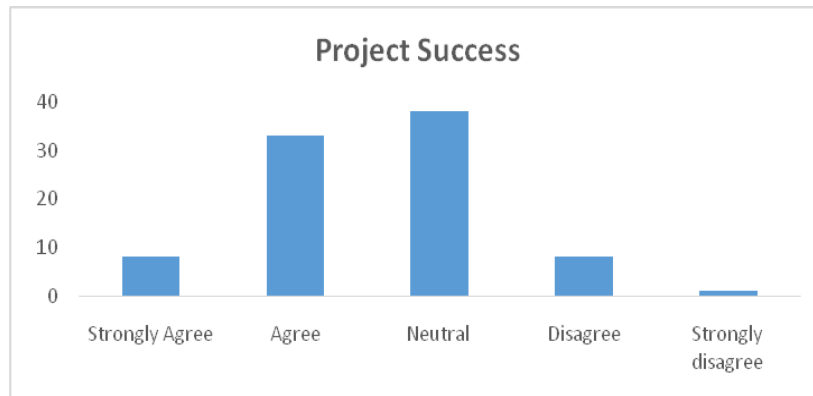


Total = (89) respondents

(32.6%)of the respondents agreed to this questions.(31.5%)were Neutral and (36%) disagreed. Overall most people disagreed to the question.

14-The concept of joint-Project Managers in UAE construction leads to greater project success

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
8	33	38	8	1

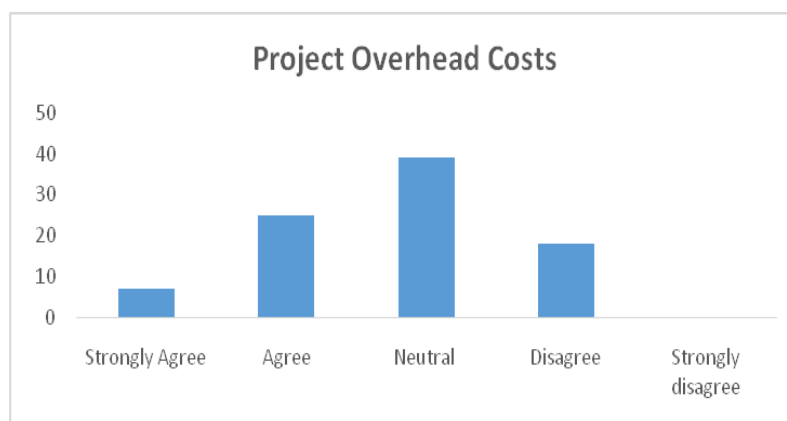


Total = (88) respondents

(46.6%)of the respondents agreed to this questions.(43.2%)were Neutral and (10.2%) disagreed. Overall most people agreed to the question.

15-The concept of joint-project Managers in UAE construction adds more to project overhead costs

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
7	25	39	18	0

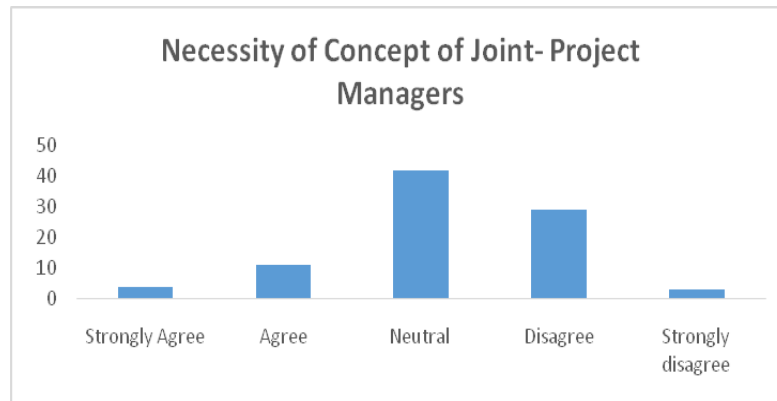


Total = (89) respondents

(36%)of the respondents agreed to this questions.(43.8%)were Neutral and (20.2%) disagreed. Overall most people neutrally to the question.

16-The concept of joint-project Managers in UAE construction is unnecessary

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
4	11	42	29	3

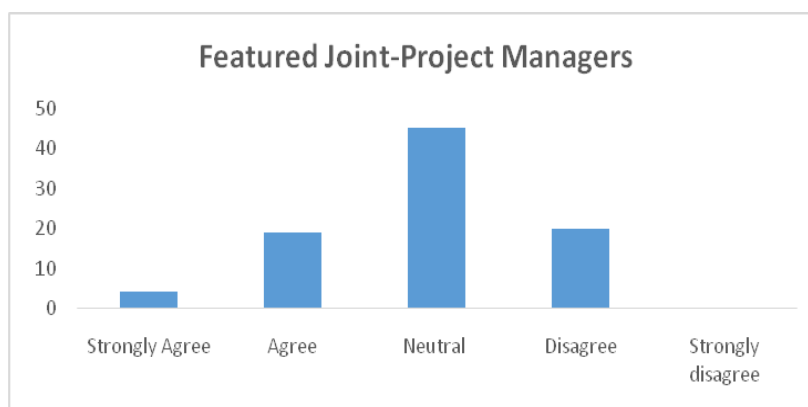


Total = (89) respondents

(16.9%)of the respondents agreed to this questions.(47.2%)were Neutral and (36%) disagreed. Overall most people neutrally to the question.

17-The concept of joint-project Managers is unique to UAE construction

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
4	19	45	20	0



Total = (88) respondents

(26.1%)of the respondents agreed to this questions.(51.1%)were Neutral and (22.7%) disagreed. Overall most people neutrally to the question.

18-Please identify the major challenges which joint-Project Managers face in the UAE (Please list as many as possible)?

1. Unrealistic deadlines
2. Communication deficit with the team
3. It adds more to the project overhead costs
4. Delays in reaching decisions which leads to more project delays.
5. It is not well understood in the UAE construction sector
6. Routines and delay in the project progress.
7. Shared responsibility, difficulty in defining purposes and objectives.
8. Coordination between management
9. Defining monetary & non-monetary contributions and responsibilities.
10. Division of works responsibilities
11. Joint planning, causes improper feasibility study
12. Difficulty setting priorities
13. Difficulty centralizing decisions
14. Controlling of time, cost and quality
15. Delays of approvals from government department
16. Working in different locations and environments
17. Possibility of duplication of work
18. Possibility of delays in actions
19. Possibility of missing data or documents due to longer procedures
20. Challenge risks beyond the control of party
21. Too many stakeholders to convince.
22. Providing a conflict resolution process with all involved stakeholders.
23. Providing a termination processes of work led delay in projects duration
24. Misunderstandings between joint-project managers regarding the issue of management; one manager may be more adept at decision making which can lead to friction, lack of cooperation and misunderstandings.
25. Difficulty supervising the projects efficiently.
26. Inconsistent follow up on the project work.

-
27. Monitoring project development
 28. Project Completion on time.
 29. Agreeing on important issues such as terms of contract.
 30. Miscommunication between employees causing wrong decisions to be made causing confusion for employees.
 31. Distribution of task priorities by different project manager
 32. Change management; dealing with changes in some of the requirements of the project at critical times of the project duration.
 33. Difficulty in coordination; which is the key challenge for any joint management project.
 34. Assurance of effective use for resources in the sense that each PM will have their own target to achieve
 35. Risk management; failure of one organization disturbs the work of the others
 36. Potential of having scope gap between different PMs which is traditionally not easy to control during project life cycle.
 37. Having different PMs may dictate a raise in project costs
 38. Commitment from all parties to the agreed project time frame.
 39. Satisfying the client here doesn't have a direct relation with project
 40. Managing the continuous changes in project designs.
 41. All parties keeping pace with the evolving communication technology
 42. Financial risks and Liabilities
 43. Dealing with cultural and social differences.
 44. Inability to impose the PM methods which can be incompatible with local policies.
 45. Controlling the work and monitoring priorities
 46. Knowing everything about the project in order to prevent problems; risk management
 47. Follow up on the project progress to make sure that issues are solved timely.
 48. Single source of decision making is preferred in the UAE.
 49. Joint project manager's causes lift and creates friction.
 50. Difficult to define boundaries of responsibilities.

19-Please identify the major benefits which joint-Project Managers contribute to construction Projects in the UAE(Please list as many as possible):

- 1- Better Quality; combined talents skills and resources

-
- 2- Improved &enhanced customer satisfaction of project handover
 - 3- Improved development within the project team
 - 4- Better services & products delivery
 - 5- It can jointly lead a project successfully alongside an experienced project manager
 - 6- All partner are involved in the construction project
 - 7- Sharing experiences and capabilities.
 - 8- Project stability; more staff to cover overall performance
 - 9- More minds on project issues and possibly better management outcome
 - 10- Time and duration of projects is less
 - 11- Better products as a result of combined efforts
 - 12- Combined efforts less mistakes
 - 13- Awareness of future challenges
 - 14- Higher knowledge of Risk management
 - 15- Double check on actions (checks & balances)
 - 16- Better outcome as a result of shared opinions;
 - 17- Sharing responsibilities less risks
 - 18- Ability to identify priorities i n future projects as a result of shared experience
 - 19- Contributes in delivering complex projects.
 - 20- Promotes in better understanding different stakeholders' interests.
 - 21- Alternative approaches
 - 22- Difficult issues could be handled better jointly
 - 23- Reduces time in achieving targets
 - 24- Satisfy our client better
 - 25- Hand over the project on the time
 - 26- Maintain safety
 - 27- Speed of Work is increased because more resources
 - 28- If coordination is successful between all parties it leads to the success of the project
 - 29- If coordination is successful between all parties it reduces the responsibility incumbent on all.
 - 30- Better team development
 - 31- Power to protect and reward subordinates
 - 32- Shared credit and incentives with all parties
 - 33- Better, wider thought out decisions
 - 34- Less load on each project manger
 - 35- Easier to detect mistakes

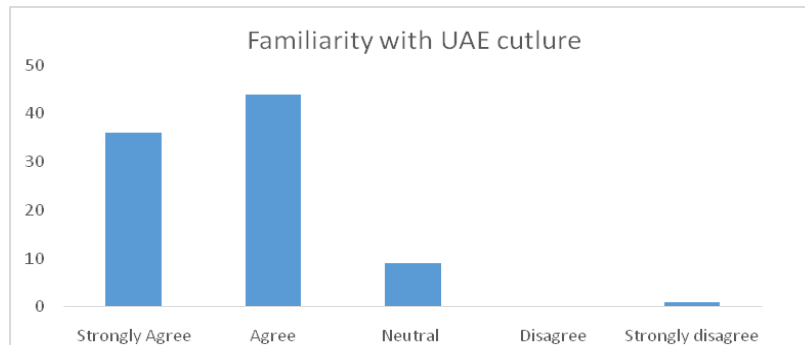
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- 36- Optimum effort from each PM in his field area
 - 37- Better adoption of new techniques gained by shared expertise of different specialty
 - 38- Robust Project structure; challenges may be solved in house.
 - 39- Smooth running of the project and avoiding mishaps as all parties are dedicated to their scope of work for the overall project target.
 - 40- Auditing is accurate based on different viewpoints
 - 41- Higher accuracy in project works
 - 42- Exchange of ideas which leads problem solvent
 - 43- Illustrates the project plan
 - 44- Team Development and innovation
 - 45- Updated Technology; more resources
 - 46- Updated Work Process systems ; more skills and knowledge
 - 47- Good and productive decisions; combined efforts and expertize
 - 48- Control the project costs reduction.
 - 49- Control the project duration.
 - 50- Setting limits to the responsibilities and liabilities
 - 51- The use of the same platform, project management software allows remote access to authorized users from multiple organizations ensuring all parties have access to the same information
 - 52- Knowledge gained from the successes and failures of a joint venture is particularly valuable since it involves so many variables that simply aren't a factor in simpler projects.
 - 53- QA/QC will be enhanced
 - 54- Reduces the required involvement of the owner / sponsor.
 - 55- Ensures that the client's vision and requirements are achieved.
 - 56- More minds on project issues and possibly better management outcome
 - 57- Working with seniors jointly.
 - 58- Joint project managers help in evolving team spirit.
 - 59- Helps in reducing stress.
 - 60- Bilingual project managers add value to the projects.

PART#5

IMPACT OF CULTURE ON CONSTRUCTION PROJECT SUCCESS IN THE UAE

- 1-I am fully familiar with the UAE culture

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
36	44	9	0	1

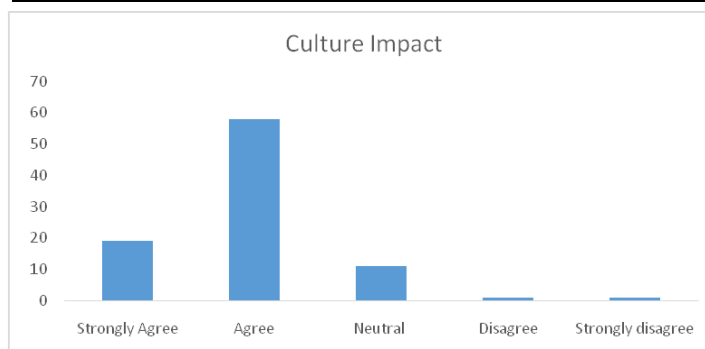


Total = (90) respondents

(88.9%)of the respondents agreed to this questions.(10%)were Neutral and (1.1%) disagreed. Overall most people agreed to the question.

2- Culture has a significant impact on the types of leaders in UAE construction

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
19	58	11	1	1

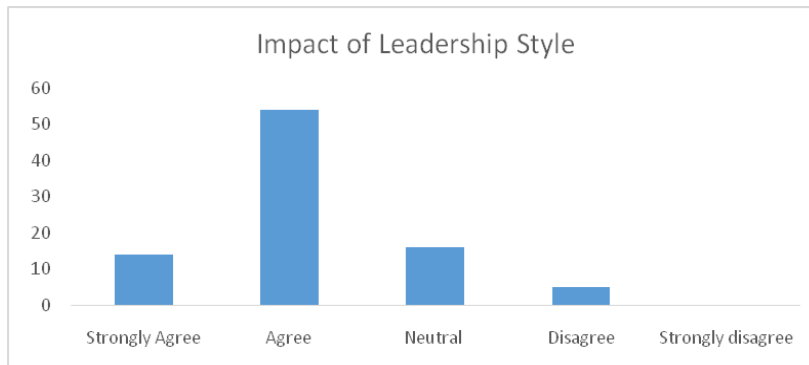


Total = (90) respondents

(85.6 %)of the respondents agreed to this questions.(12.2%)were Neutral and (2.2%) disagreed. Overall most people agreed to the question.

3- The UAE culture has a significant impact on the adoption of leadership style in construction

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
14	54	16	5	0

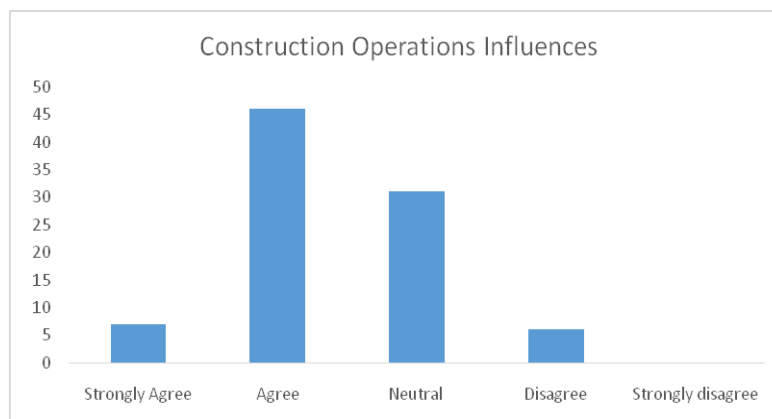


Total = (89) respondents

(76.4%) of the respondents agreed to this questions. (18%) were Neutral and (5.6%) disagreed. Overall most people agreed to the question.

4- The UAE culture influences construction operations on site

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
7	46	31	6	0

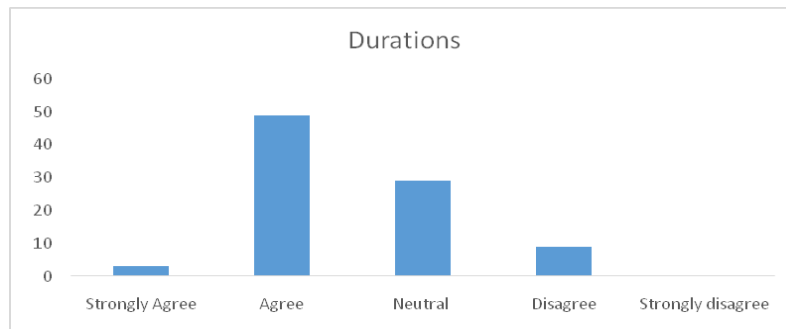


Total = (90) respondents

(51.1%) of the respondents agreed to this questions. (34.4%) were Neutral and (6.7%) disagreed. Overall most people agreed to the question.

5- The UAE culture influences the durations of construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
3	49	29	9	0

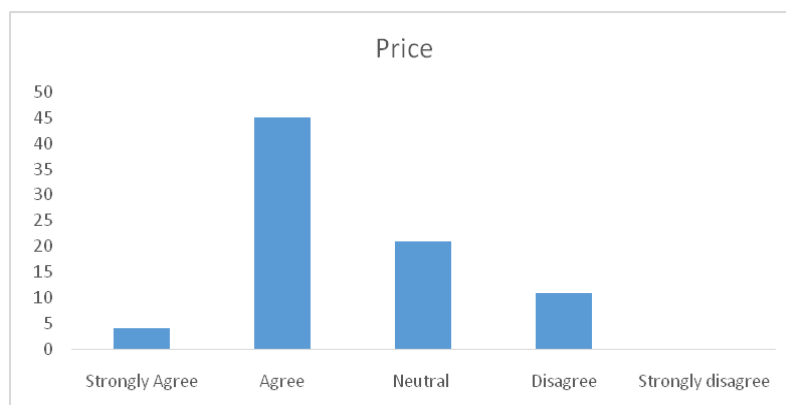


Total = (90) respondents

(57.8%)of the respondents agreed to this questions.(32.2%)were Neutral and (10%) disagreed. Overall most people agreed to the question.

6- The UAE culture influences the price of construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
4	45	21	11	0

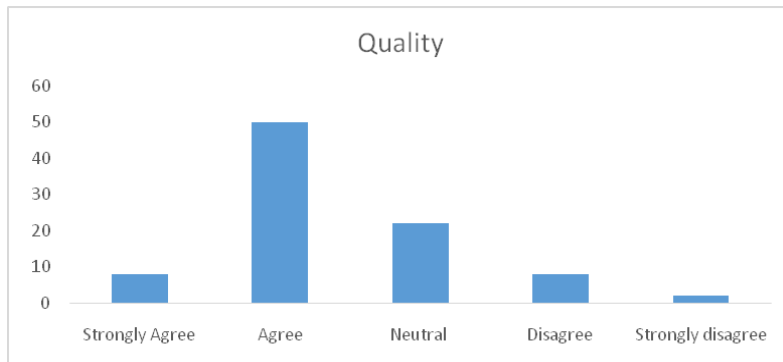


Total = (81) respondents

(60.5%)of the respondents agreed to this questions.(25.9%)were Neutral and (13.6%) disagreed. Overall most people agreed to the question.

7- The UAE culture influences the quality of construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
8	50	22	8	2

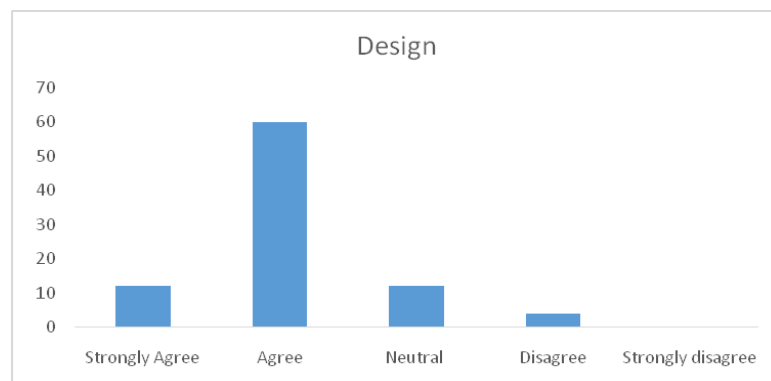


Total = (90) respondents

(64.4%) of the respondents agreed to this question. (24.4%) were Neutral and (11.1%) disagreed. Overall most people agreed to the question.

7- The UAE culture influences the design of construction buildings and other facilities

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
12	60	12	4	0

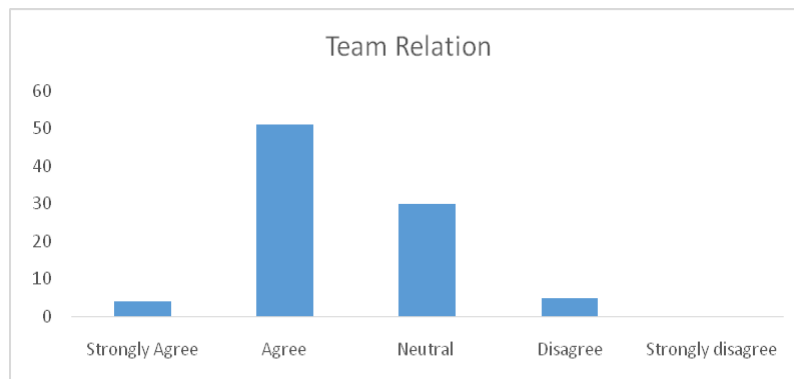


Total = (88) respondents

(81.1%) of the respondents agreed to this question. (13.6%) were Neutral and (4.5%) disagreed. Overall most people agreed to the question.

9-The UAE culture influences the way project teams relate with each other

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
4	51	30	5	0

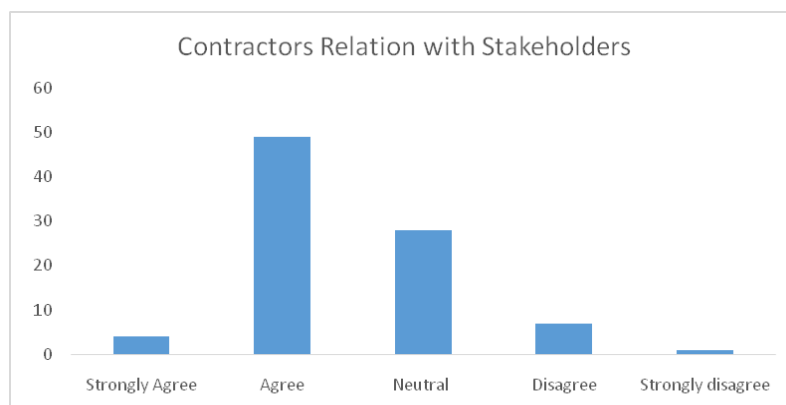


Total = (90) respondents

(61.1%)of the respondents agreed to this questions.(33.3%)were Neutral and (5.6%) disagreed. Overall most people agreed to the question.

10- The UAE culture influences how contractors relate with other stakeholders

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
4	49	28	7	1

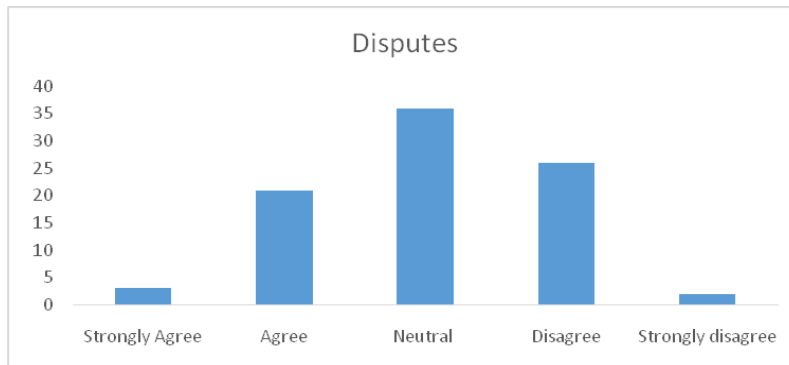


Total = (89) respondents

(59.6%)of the respondents agreed to this questions.(31.5%)were Neutral and (9%) disagreed. Overall most people agreed to the question.

11- The UAE culture contributes to more disputes in construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
3	21	36	26	2

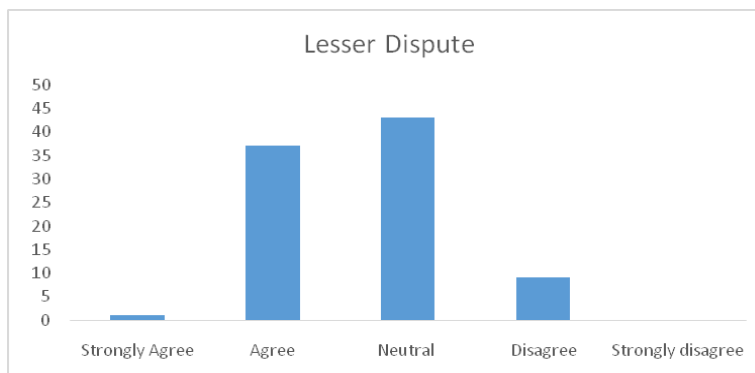


Total = (88) respondents

(27.3%) of the respondents agreed to this question. (40.9%) were Neutral and (31.8%) disagreed. Overall most people neutrally to the question.

12- The UAE culture contributes to lesser dispute in construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1	37	43	9	0

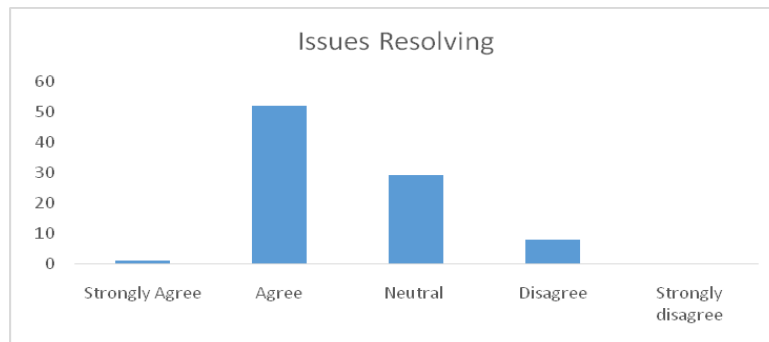


Total = (90) respondents

(42.2%) of the respondents agreed to this question. (47.8%) were Neutral and (10%) disagreed. Overall most people neutrally to the question.

13- The UAE culture influences the way construction disputes or issues are resolved

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1	52	29	8	0

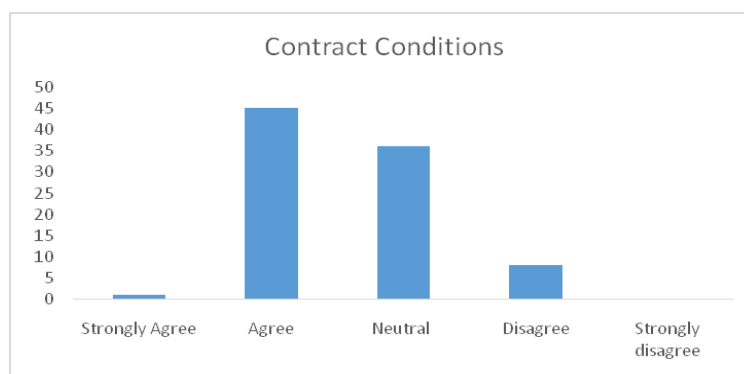


Total = (90) respondents

(58.9%) of the respondents agreed to this question. (32.2%) were Neutral and (8.9%) disagreed. Overall most people agreed to the question.

14- The UAE culture influences the Conditions of Contract used on construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1	45	36	8	0

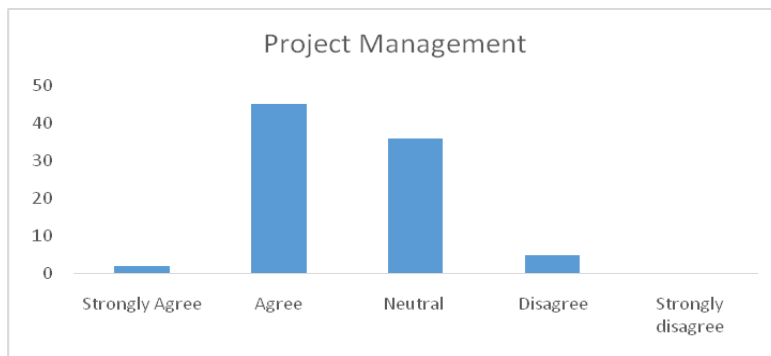


Total = (90) respondents

(51.1%) of the respondents agreed to this question. (40%) were Neutral and (8.9%) disagreed. Overall most people agreed to the question.

15- The UAE culture influences the overall project management of construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	45	36	5	0

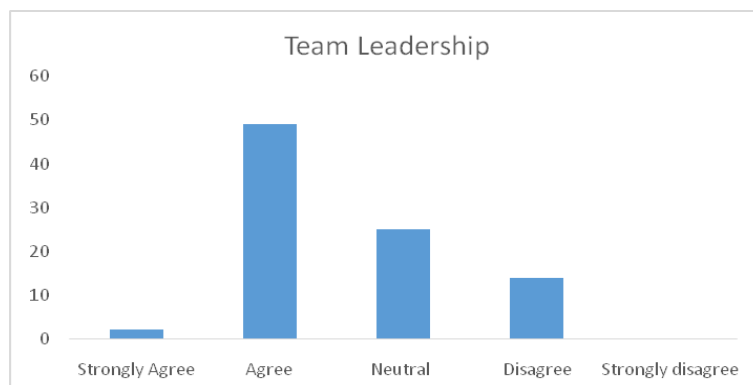


Total = (88) respondents

(53.4%)of the respondents agreed to this questions.(40.9%)were Neutral and (5.7%) disagreed. Overall most people agreed to the question.

16- The UAE culture influences the use of team leadership in construction projects

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	49	25	14	0

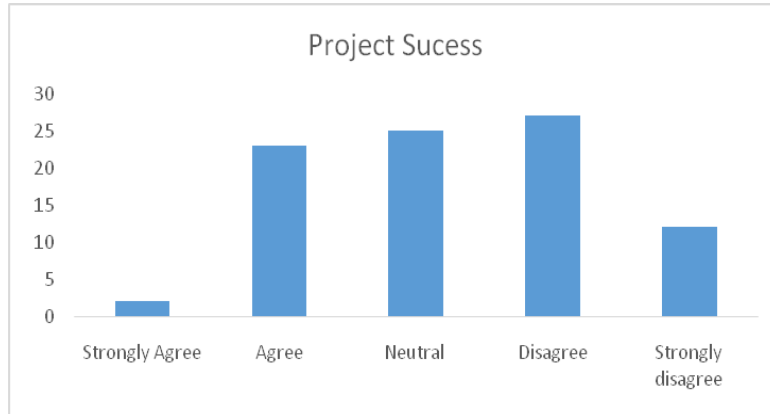


Total = (90) respondents

(56.7 %)of the respondents agreed to this questions.(27.8%)were Neutral and (15.6%) disagreed. Overall most people agreed to the question.

17- The UAE culture is a barrier to project success in UAE construction

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
2	23	25	27	12

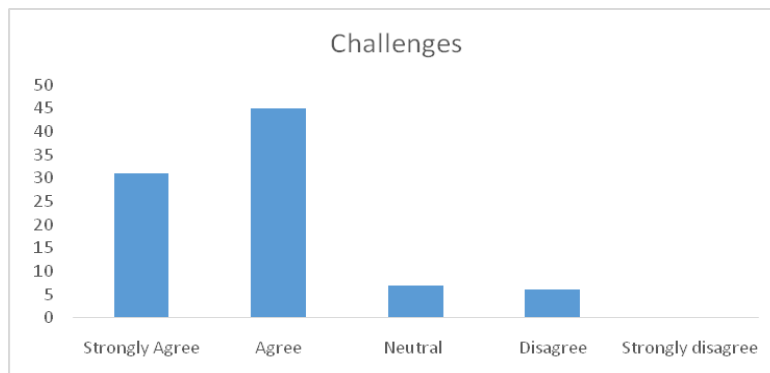


Total = (89) respondents

(28.1%)of the respondents agreed to this questions.(28.1%)were Neutral and (43.8%) disagreed. Overall most people disagreed to the question.

18- A project Manager with no engineering background is likely to face more challenges

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
31	45	7	6	0



Total = (89) respondents

(85.4%)of the respondents agreed to this questions.(7.9%)were Neutral and (6.7%) disagreed. Overall most people agreed to the question.

19- Please identify the major cultural challenges you have faced in your construction projects in the UAE (Please list as many as possible)?

1. Cultural awareness with the workers & project team
2. Cultural matching
3. Flexibility & adaptability between UAE culture & other cultures
4. Finalizing requirements and specifications in consultation with Architects/collaborators / promoters
5. Plan out an organizational structure to bring out ease and flow in the tasks to be performed to the fullest efficiency.
6. Anchoring on-site construction activities to ensure completion of projects within the time & cost parameters and effective resource utilization to maximize output.
7. Participation of project review meetings to evaluate project progress
8. Provide technical inputs to construction methodology and maintaining confidentiality.
9. Cultural understanding with staff from different cultures and backgrounds
10. Coordination between team members from different backgrounds
11. Communication conflicts
12. Traditional aspects point of views
13. Change and modification management
14. Setting priorities
15. Top management and decision makers are not easy to communicate with
16. Centralization of decision making
17. Actions delays
18. Routine work methods
19. Working full time on the site
20. Depending and relying on others
21. Checking the project specifications when necessary only
22. Language barrier for Non- Arabs especially during meetings.
23. In discussion, sometime minor issues take more time than major issues
24. More formalities
25. Influences to some extent are based on likes and dislikes
26. Understanding the stakeholders' role in the project lifecycle.
27. The ability to adopt foreign management styles within the local authorities' method of operations.
28. Many end users with many different opinions.

-
29. Same projects with same different needs
 30. Delays in decision making lead to increase in cost estimation of projects
 31. Meeting target requirements
 32. Dealing with Authorities
 33. Delay of impact
 34. Delay of approval
 35. Delay of payment
 36. Delay in progress
 37. Multicultural society
 38. Diverse work force
 39. Cosmopolitan teams
 40. Location and geography
 41. Different communication Styles
 42. Different decision-making styles
 43. Different approaches to make different team members understand
 44. Different approaches to completing tasks
 45. Designing specific spaces taking male and female segregation into consideration.
 46. Designing specific spaces keeping VIP access into consideration
 47. Integrity between people from various cultural backgrounds
 48. The use of unskilled/uneducated labor force due to cost limitation
 49. Most variation orders (Time, Money or both) could be avoided at the design stage.
Taking the end user's approval of projects is very important especially when they do not have an engineering background.
 50. Using relationships and connections with top management to intervene with the project (changes, temporary stop, adjusting project sequence (stop one area to start another...eg. Road projects)
 51. Unqualified contractors
 52. The unavailability of well-organized consultants
 53. Dealing with Customs and traditions
 54. Conservative local cultural verses the open foreign viewpoints
 55. Communication barriers; non-familiar foreign employees labors with U.A.E's Cultural (especially language)
 56. Unnecessary Delays (postponing things till tomorrow)
 57. Dependency and not taking decisions
 58. Various education back

-
59. People act as if they know everything but in reality they do not
 60. External interference.
 61. Dealing with end user variations and changes.
 62. Pleasantries and favoritism
 63. The fact that people are classified into “status hierarchies” – a system that measures an individual’s value based on their national culture
 64. Divergent norms and values were cited among all project teams (laborers, contractors, and construction managers).
 65. Differences in basic belief systems and national allegiances can create a host of misunderstandings and disagreements, some of which can escalate into costly conflicts.
 66. Lack of preconstruction planning and document control
 67. Frequent scope changes, inconsistent variation request procedures, and government implications
 68. Obtaining authority approvals takes a long time
 69. Major cultural challenge behaviors of diverse consultant
 70. Split shifts
 71. Dealing with new systems and regulation in the government Authority.
- 20- Please identify the benefits of UAE culture to construction project delivery (Please list as many as possible)?
- 1- Good communication between (project team & leadership).
 - 2- Self motivated individuals
 - 3- Friendly attitude
 - 4- Ready to Support project staff
 - 5- Social Values get high place
 - 6- Ability to have intimate relationship between the stakeholders.
 - 7- Strong leadership style
 - 8- Easy Rules to do
 - 9- Make Good Leadership
 - 10- Open-minded of construction projects Variable Conditions
 - 11- Welling to Support any New Ideas for the project benefits
 - 12- Fidelity

❖ Appendix D

(An Improved Framework for more effective joint – leadership In construction projects by Abu Dhabi Police)

Instructions

- **Please see the attached Improved framework and after that answer all questions**
- **Please answer on the basis of your true opinion.**

1.The improved framework is?

- ☐ Easy to understand
- ☐ Difficult to understand
- ☐ Neither easy nor difficult to understand

2.The improved framework will?

- ☐ Reduce communication time
- ☐ Not reduce communication time
- ☐ Not impact on communication time

3.The improved framework will?

- ☐ Improve the choice of joint leaders (two Project Managers) for the same project.
- ☐ Not improve the choice of joint leaders (two Project Managers) for the same project.
- ☐ Have little impact on improving the choice of joint leaders (two Project Managers) for the same project.

4.The improved framework will?

- ☐ Help UAE culture to be communicated better in project designs
- ☐ Not help UAE culture to be communicated better in project designs
- ☐ Reflect only some aspects of UAE culture in project designs

5.The improved framework will?

- ☐ Help project managers with no engineering background through training
- ☐ Not help project managers with no engineering background through training
- ☐ Not impact on project managers that have no engineering background

6.The improved framework will?

- ☐ Increase internal stakeholders understanding of joint- leadership in AD police projects
- ☐ Decrease internal stakeholders understanding of joint- leadership in AD police projects
- ☐ Not affect internal stakeholders understanding of Joint leadership in AD police projects

7.The improved framework will?

- ☐ Increase external stakeholders understanding of joint- leadership in AD police projects
- ☐ Decrease external stakeholders understanding of joint- leadership in AD police projects
- ☐ Not affect external stakeholders understanding of Joint leadership in AD police projects

8. The improved framework will?

- ☐ Increase the understanding of the FIDIC contract in AD police projects
- ☐ Decrease the understanding of the FIDIC contract in AD police projects
- ☐ Not affect the understanding of the FIDIC contract in AD police projects.

9.The improved framework will?

- ☐ Make AD police projects managers training to address effective and efficient leadership
- ☐ Not make AD police projects managers training to address effective and efficient leadership
- ☐ Not affect the effectiveness and efficiency of AD police projects managers.

10.The improved framework will make the contracts for AD police projects to reflect UAE culture?

- ☐ Agree
- ☐ Not agree
- ☐ No comments

11. The improved framework will?

- ☐ Help in improving quality due to appointed project manager by consultants
- ☐ Not help in improving quality due to appointed project manager by consultants
- ☐ Not effect

12. Your overall opinion of the framework:

- I recommend this improved framework because

.....
.....
.....

- I do not recommend this improved framework

because.....
.....

Your Details:

Name:.....

Job Titel:.....

Your construction experience is ?.....years long

Your knowledge of AD Police projects and procedures is ? Low Moderate High Very High

End of Questions

THANK YOU VERY MUCH FOR YOUR TIME AND RESPONSES

Please return completed responses to:

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